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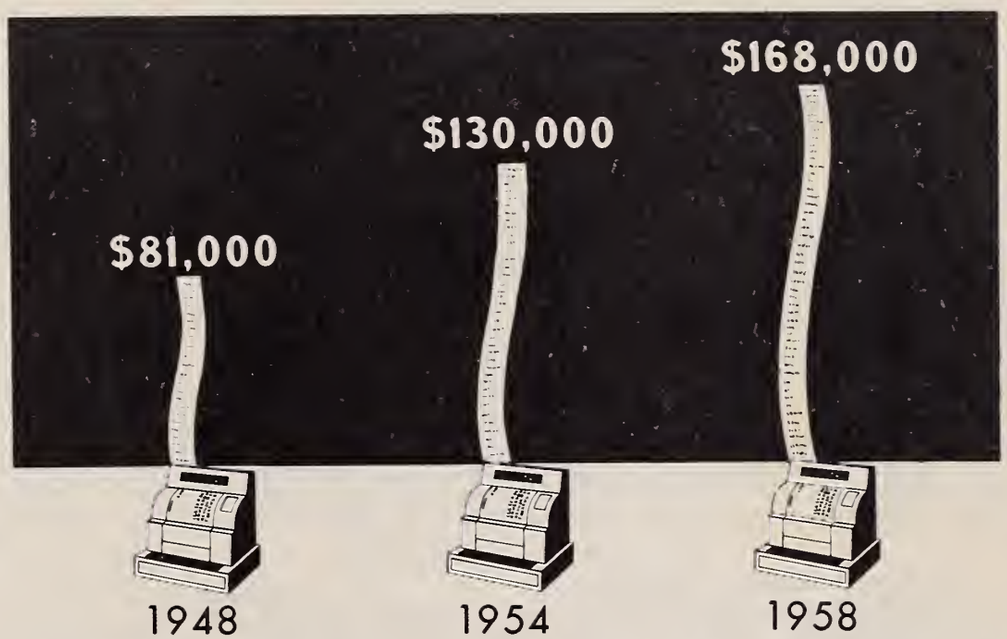
The MARKETING and TRANSPORTATION SITUATION

Average sales per grocery store, adjusted for price level changes, more than doubled from 1948 to 1958. The growth in average sales per store resulted from the opening of many large supermarkets and the closing of a larger number of small stores. The number of grocery stores decreased by a fourth. The new supermarkets, which generally had parking lots and carried many more articles than the smaller stores, were better equipped to accommodate once-a-week, one-stop shopping that became more common during this period.

AVERAGE SALES PER RETAIL GROCERY STORE



BASED ON BUREAU OF THE CENSUS DATA. INCLUDES DELICATESSEN STORES. SALES IN 1958 DOLLARS.
U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 868-62(1) ECONOMIC RESEARCH SERVICE

IN THIS ISSUE

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STATISTICAL SUMMARY OF MARKET INFORMATION

Item	Unit or base period	1960 Year	1960 Oct.-Dec.	1961 Apri.-June	1961 July-Sept.	1961 Oct.-Dec.
Farm-to-retail price spreads						
Farm-food market basket: 1/						
Retail cost	Dol.	1,053	1,065	1,062	1,061	1,049
Farm value	Dol.	407	417	399	400	398
Farm-retail spread	Dol.	646	648	663	661	651
Farmer's share of retail cost	Pct.	39	39	38	38	38
Cotton: 2/						
Retail cost	Dol.	2.17	2.19	2.18	2.19	---
Farm value	Dol.	.30	.29	.31	.32	---
Farm-retail spread	Dol.	1.87	1.90	1.87	1.87	---
Farmer's share of retail cost	Pct.	14	13	14	15	---
Cigarettes: 3/						
Retail cost	Ct.	27.2	---	---	---	---
Farm value	Ct.	4.02	---	---	---	---
Federal and State excise taxes	Ct.	12.1	---	---	---	---
Farm-retail spread excluding excise taxes	Ct.	11.1	---	---	---	---
Farmer's share of retail cost	Pct.	15	---	---	---	---
General economic indicators						
Consumers' per capita income and expenditures: 4/						
Disposable personal income	Dol.	1,947	1,951	1,947	1,998	2,032
Expenditures for goods and services	Dol.	1,820	1,827	1,834	1,853	1,888
Expenditures for food	Dol.	389	391	389	393	394
Expenditures for food as percentage of disposable income	Pct.	20.0	20.0	19.7	19.7	19.4

		1960	1961			
		Year	Dec.	Oct.	Nov.	Dec.
5/:						
Hourly earnings, production workers, manufacturing	Dol.	2.26	2.29	2.34	2.36	2.37
Hourly earnings of food marketing employees 6/	Dol.	1.96	1.99	2.04	2.06	---
Retail sales: 7/						
Food stores	Mil. dol.	4,485	4,502	4,646	4,694	4,634
Apparel stores	Mil. dol.	1,142	1,100	1,173	1,187	1,172
Manufacturers' inventories: 7/						
Food and beverage	Mil. dol.	4.98	4.98	5.15	5.19	5.25
Textile	Mil. dol.	2.67	2.67	2.74	2.75	2.75
Tobacco	Mil. dol.	2.03	2.03	2.06	2.12	2.20
Indexes of industrial production: 8/						
Food and beverage manufactures	1957=100	109	110	116	116	---
Textile mill products	1957=100	109	98	118	117	---
Apparel products	1957=100	124	119	130	129	---
Tobacco products	1957=100	114	115	123	---	---
Index of physical volume of farm marketings	1947-49=100	133	146	198	176	145
Price indexes						
Consumer price index 5/	1947-49=100	126.5	127.5	128.4	128.3	128.2
Wholesale prices of food 5/	1947-49=100	106.0	107.3	105.6	105.4	105.6
Wholesale prices of cotton products 5/	1947-49=100	94.2	91.2	91.6	91.8	91.9
Wholesale prices of woolen products 5/	1947-49=100	102.1	100.8	101.6	101.6	101.6
Prices received by farmers 9/	1947-49=100	88	89	89	88	89
Prices paid by farmers 9/	1947-49=100	115	115	115	115	115

1/ Average quantities of farm food products purchased per wage-earner or clerical-worker family in 1952. 2/ Data for average family purchases in 1950 of 25 articles of cotton clothing and housefurnishings divided by number of pounds of lint cotton required for their manufacture; see U.S. Dept. Agr. Mktg. Res. Rpt. 277. 3/ Preliminary data for package of regular-sized, popular brand cigarettes; farm value is return to farmer for 0.065 lb. of leaf tobacco of cigarette-types; data for fiscal year beginning July 1, 1960. 4/ Seasonally adjusted annual rates, calculated from Dept. of Commerce data. Fourth quarter 1961 data are from preliminary estimates by the Council of Economic Advisers. 5/ Dept. Labor, revised data. 6/ Weighted composite earnings in food processing, wholesale trade, retail food stores, calculated from data of Dept. Labor, revised data, see table 3, p. 8. 7/ Seasonally adjusted, Dept. Commerce. Sales data for 1960 are averages of monthly totals. Inventory data for 1960 are book values at end of year. 8/ Seasonally adjusted, Board of Governors of Federal Reserve System. 9/ Converted from 1910-14 base.

THE MARKETING AND TRANSPORTATION SITUATION

Approved by the Outlook and Situation Board, February 1, 1962

CONTENTS

SUMMARY

Charges for marketing farm food products increased about 2 percent last year, continuing the steady uptrend since 1950. They rose about 1 percent in each of the 2 preceding years.

Unit costs of performing marketing services also increased slightly in 1961. Hourly earnings of food marketing employees averaged about 4 percent higher in 1961 than in 1960. Labor costs per unit of product marketed did not go up as much, however, as output per man-hour increased. For the third consecutive year, freight rate decreases moderately outweighed increases. Construction costs went up again. State and local taxes continued to rise. Food manufacturing firms' profits as a percentage of sales were down from 1960 levels in the first three quarters of 1961.

Another increase is expected in marketing charges this year, but it probably will not be greater than 1 or 2 percent. Labor costs and other costs incurred by marketing firms are likely to increase.

Prices farms received for food products in the Market Basket averaged about 1 percent lower in 1961 than in 1960, mainly because of lower prices for beef cattle and poultry. Prices of beef cattle dropped during the spring and early summer as the volume of cattle slaughtered increased sharply. Production of broilers was about 10 percent larger in 1961 than in 1960, and in September 1961 prices received by producers fell to the lowest level since monthly price data became available in 1940. Prices of lambs averaged the lowest since 1946. These and other price reductions were partly offset by increases in prices of hogs, cottonseed, soybeans, wheat, and several other products.

Retail prices of farm food products went up less than 1 percent from 1960 to 1961, and the average for the year remained a shade below the record annual average established in 1958. Retail prices of most products changed in the same direction as the prices farmers received. Increases, however, generally were larger at the retail level, and decreases generally were larger at the farm level.

Farmers received 38 cents of the dollar consumers spent for farm foods in 1961, compared with 39 cents in 1960. The farmer's share decreased from 49 cents in 1951 to 38 cents in 1959 and 1961.

Highlights of Special Articles

Concern about the bargaining position of farmers relative to marketing agencies that purchase their products focuses attention on developments taking place among food marketing firms. Output per plant has increased in industries manufacturing foods from farm-produced raw materials. This increase enabled these industries to boost total output while the number of plants declined from approximately 29,600 in 1948 to 26,500 in 1958. A similar development occurred in the retail food trade. Grocery store sales (adjusted for price increases) rose more than 50 percent while the number of stores declined from approximately 358,700 in 1948 to 259,800 in 1958. Food manufacturers and retailers have built many large plants and stores. Adoption of new technology has increased output per man-hour. Sales in the wholesale food trade have continued to grow in spite of an increase in direct buying by retailers from manufacturers, local assemblers, and farmers. (The Food Marketing Industries - Recent Changes and Future Prospects, pp. 15 - 37.)

Food retailing by discount houses is growing in terms of both dollar volume and number of outlets. Within a relatively short period of time, this new concept of distribution has garnered an estimated 4 percent of total retail food sales. There are indications that discount house food departments could have lower operating costs than conventional supermarkets. If discount house retail food operations achieve the sales volume optimistically predicted by some trade sources - $8 billion by 1966 - they will have an important influence on traditional patterns of food distribution; however, in order to achieve this sales volume discount house operators will have to attain the proper balance in satisfying consumer preferences and efficient operations. (Food Retailing in Discount Houses, pp. 38 - 41.)

FARM-RETAIL PRICE SPREADS FOR FARM FOOD PRODUCTS

Marketing Charges Rise Slightly in 1961

Marketing charges for assembling, processing, and distributing farm food products increased about 2 percent from 1960 to 1961, somewhat smaller than the 2.8 percent average increase since 1950. 1/ The spread for the market basket of farm foods has reached a new record each year since 1950. In 1961, it averaged $656, up 34 percent from 1950 (table 1). In the 2 preceding years, the spread rose about 1 percent a year.

During 1961, the farm-retail spread increased in the first and second quarters and declined in the third and fourth. In the fourth quarter, it averaged $651, about the same as in the first quarter (table 18, p. 45).

Farm-retail spreads for each of the product groups increased from 1960 to 1961 (table 2). All increases were relatively moderate, with no group showing much deviation from the average.

1/ The "market basket" contains the average quantities of farm-produced food products purchased per family in 1952 for consumption at home by urban wage-earner and clerical-worker families. Additional information concerning the contents of the market basket and methods of estimating market-basket data are given in Farm-Retail Spreads for Food Products, U. S. Dept. Agr., Misc. Pub. 741, November 1957. The farm-retail spread is the difference between the retail price paid by the consumer and the payment to the farmer for equivalent farm products. It is an estimate of the charges made by marketing agencies for assembling, processing, transporting, and distributing farm food products.

Table 1.--The farm food market basket: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1947-61 1/

Year and month	Retail cost 2/	Farm value 3/	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Percent
1947-49 average	940	466	474	50
1950	920	432	488	47
1951	1,024	497	527	49
1952	1,034	482	552	47
1953	1,003	445	558	44
1954	986	421	565	43
1955	969	395	574	41
1956	972	390	582	40
1957	1,007	401	606	40
1958	1,064	430	634	40
1959	1,040	398	642	38
1960	1,053	407	646	39
1961 4/	1,060	404	656	38
1960				
January	1,030	387	643	38
February	1,028	392	636	38
March	1,032	410	622	40
April	1,053	415	638	39
May	1,055	410	645	39
June	1,062	405	657	38
July	1,064	405	659	38
August	1,056	400	656	38
September	1,055	402	653	38
October	1,062	411	651	39
November	1,065	420	645	39
December	1,068	421	647	39
1961				
January	1,068	418	650	39
February	1,070	424	646	40
March	1,068	414	654	39
April	1,069	408	661	38
May	1,060	397	663	37
June	1,059	392	667	37
July	1,066	396	670	37
August	1,060	402	658	38
September	1,058	402	656	38
October	1,054	396	658	38
November	1,045	395	650	38
December	1,047	405	642	39

1/ The farmer's share and index numbers of the retail cost, farm value, and farm-retail spread for the years 1913-59 are published in Supplement for 1956-60 to Farm-Retail Spreads for Food Products, U.S. Dept. Agr., Misc. Pub. 741, 1961. 2/ Retail cost of average quantities purchased per family in 1952 by urban wage-earner and clerical worker families, calculated from retail prices collected by the Bur. Labor Statistics. 3/ Payment to farmers for equivalent quantites of farm produce minus imputed value of byproducts obtained in processing. 4/ Preliminary estimates.

Current data are given in the Statistical Summary, a monthly publication of the Statistical Reporting Service.

Table 2.--The market basket of farm food products: Annual average retail cost, farm value, farm-retail spread, and farmer's share, 1961 and 1960

Item	12-month average 1961	12-month average 1960	Change 1961 from 1960	
			Actual	Percentage
	Dollars	Dollars	Dollars	Percent
	Retail cost			
Market basket	1,060.22	1,052.57	7.65	1
Meat products	277.60	276.22	1.38	1/
Dairy products	201.97	199.59	2.38	1
Poultry and eggs	86.76	90.42	-3.66	-4
Bakery and cereal products	167.69	164.54	3.15	2
All fruits and vegetables	237.91	237.07	.84	1/
Fats and oils	43.41	40.75	2.66	7
Miscellaneous products	44.88	43.98	.90	2
	Farm value			
Market basket	403.94	406.59	-2.65	-1
Meat products	140.67	143.33	-2.66	-2
Dairy products	89.46	88.93	.53	1
Poultry and eggs	52.07	56.19	-4.12	-7
Bakery and cereal products	29.85	28.31	1.54	5
All fruits and vegetables	71.12	71.44	- .32	1/
Fats and oils	13.63	11.13	2.50	22
Miscellaneous products	7.14	7.27	- .13	-2
	Farm-retail spread			
Market basket	656.28	645.98	10.30	2
Meat products	136.93	132.89	4.04	3
Dairy products	112.51	110.66	1.85	2
Poultry and eggs	34.69	34.23	.46	1
Bakery and cereal products	137.84	136.23	1.61	1
All fruits and vegetables	166.79	165.63	1.16	1
Fats and oils	29.78	29.62	.16	1
Miscellaneous products	37.74	36.71	1.03	3
	Farmer's share of retail cost			
	Percent	Percent	Percentage point	
Market basket	38	39	-1	
Meat products	51	52	-1	
Dairy products	44	45	-1	
Poultry and eggs	60	62	-2	
Bakery and cereal products	18	17	1	
All fruits and vegetables	30	30	0	
Fats and oils	31	27	4	
Miscellaneous products	16	17	-1	

1/ Less than 0.5 percent.

The small increase in the total spread of the market basket reflects relatively stable costs for marketing farm foods in 1961. Average hourly earnings of food marketing employees rose about 4 percent (table 3), but this increase was partly offset by a rise in output per man-hour. Thus, labor costs per unit of food marketed remained relatively stable for the third consecutive year. The relative stability has been significant in holding down increases in the spread, since direct labor costs accounted for nearly half of the charges for marketing farm food products.

Rail freight rates for farm food products probably averaged slightly lower in 1961, continuing the slight decline in 1960 and 1959. Many of the decreases have resulted from adoption of incentive rates and rate reductions for selected commodities. Truck rates for farm products probably did not change much, since trucking firms try to maintain rates that are competitive with those of railroads.

Wholesale prices of machinery and equipment, glass containers, paper board, and a few other items bought by marketing agencies declined in 1961. Prices of metal containers and power and fuel increased. Construction costs continued to rise. State and local taxes continued to increase in 1961, reflecting more government services and higher costs of these services. Total profits (before taxes) of food manufacturing corporations were about 6 percent higher in the first 3 quarters of 1961 than in the same period of 1960, but profits as a percentage of sales were lower than a year earlier. 2/

In 1962 marketing charges are likely to increase again, although probably not more than 1 or 2 percent. Average hourly earnings, one of the major cost items, are likely to increase, but gains in productivity probably will keep unit labor costs from rising appreciably. Food marketing firms generally must keep wages in line with those of other industries in order to retain employees in the industry. In recent years, average hourly earnings in food manufacturing industries have increased at a slightly faster rate than those in all manufacturing. Substantial wage increases in other sectors of the economy will have to be at least partly matched by food marketing firms. Thus, the outlook for wages depends somewhat on whether there is a rise in the general level of prices and wages. Rail freight rates are likely to remain about the same this year as last. Truck rates are not likely to change much either.

Farm Value Declines 1 Percent

The farm value of the market basket foods declined from an annual average of $407 in 1960 to $404 in 1961. 3/ It rose from $432 in 1950 to $497 in 1951, then declined to a low of $390 in 1956. Since 1956, the annual average has fluctuated between $398 and $407, except for 1958 when it rose to $430.

The decline in the market basket farm value was the result of nearly offsetting changes among the product groups. Meat products declined 2 percent, poultry and eggs 7 percent, and miscellaneous products 2 percent. The farm value for bakery products rose 5 percent, and the fats and oils farm value increased 22 percent.

After declining 5 percent in the second quarter in 1961, the farm value of the market basket held steady in the third and fourth quarters; in the final quarter, it was 5 percent lower than in the same

2/ According to a joint report by the Federal Trade Commission and the Securities and Exchange Commission.

3/ The farm value is the return to farmers for the farm products equivalent to foods in the market basket.

Table 3.--Average hourly earnings of employees in food marketing firms, 1947 to 1961 1/

Year	Hourly earnings	Month	Hourly earnings	
			1960	1961
	Dollars		Dollars	Dollars
1947	1.03	January	1.94	2.01
1948	1.12	February	1.95	2.02
1949	1.17	March	1.95	2.02
		April	1.95	2.03
1950	1.22	May	1.96	2.04
1951	1.30	June	1.97	2.04
1952	1.38	July	1.97	2.04
1953	1.46	August	1.95	2.02
1954	1.51	September	1.96	2.04
1955	1.58	October	1.98	2.04
1956	1.67	November	1.99	2.06
1957	1.75	December	1.99	--
1958	1.82			
1959	1.88			
1960	1.96			
1961	2/ 2.03			

1/ These data are obtained by weighing estimates published by the Bureau of Labor Statistics of average earnings in the food and kindred products manufacturing industry, the wholesale food trade, and retail food trade. The BLS recently revised its estimates, so the averages above differ from those previously published.

2/ Preliminary.

quarter of 1960 (table 17, p. 44). The decrease from a year earlier was caused by lower prices for meat animals, milk, eggs, frying chickens, and several fresh fruits and vegetables.

Retail Cost Inches Up

The retail cost of the market basket foods increased less than 1 percent from 1960 to 1961, and was still less than the record $1,064 (annual rates) for 1958. 4/ Since 1950, the retail cost has risen 15 percent, but most of that increase came in 1951. Since then, it has risen less than 4 percent.

Moderate increases in 1961 were shown by the bakery and cereal products, dairy products, and fats and oils groups. The poultry and eggs group was the only one to show a decrease in retail cost.

In the fourth quarter last year, the retail cost, averaged $1,049 (annual rate), 2 percent below a year earlier. Another small rise in the retail cost is in prospect for 1962.

4/ The retail cost of the market basket of farm foods is less than the retail cost of all foods bought per family. The market basket of farm foods does not include imported foods, fishery products, and other foods of nonfarm origin or costs of meals purchased in eating places.

Farmer's Share Down From 1960

The farmer's share of the consumer's dollar spent for farm food products declined to 38 cents in 1961 from 39 cents in 1960. The monthly farmer's share fluctuated between 37 and 40 cents last year, a little wider range than in 1960. From 1951 to 1961, the annual average farmer's share declined from 49 to 38 cents.

Beef Prices Drop; Pork Prices Higher

The farm value of the meat products group was down 2 percent in 1961 (table 2). This decline was the result of decreases in the farm values of beef and lamb (tables 19 and 20, pp. 46 and 47). The farm value of pork was up. Nearly all of the decrease in the farm value of the group was offset by a 3 percent higher marketing margin, caused mostly by higher margins for beef and lamb. The retail cost of the meat group scarcely changed from 1960 to 1961. Decreases for beef and lamb were offset by increases for pork and veal.

A sharp increase in beef cattle slaughter during the second quarter of 1961 lowered the farm value of Choice grade beef 14 percent below a year earlier. Beef cattle prices recovered somewhat in the third and fourth quarters, but not enough to bring the farm value up to the 1960 level. The retail price of Choice grade beef also was lower in 1961, although the decrease was smaller than for the farm value. As a result the farm-retail spread for Choice grade beef increased 4 percent (tables 19 and 20, pp. 46 & 47). This increase occurred in the wholesale-retail segment of the spread (table 4). The live-wholesale segment decreased about 1 percent from 1960 to 1961.

Total pork production in 1961 was less than in 1960, which led to a 7 percent increase in the farm value of pork (retail cuts). The retail price rose 4 percent and the marketing margin, 2 percent.

Farm Value of Lamb Lowest Since 1946

The farm value of lamb declined 13 percent from 1960 to 1961 (tables 19 and 20 pp. 46 and 47). This was the third consecutive decrease in the annual average, and it reduced the farm value to the lowest level since 1946. This large decrease was accompanied by an increase in slaughter. The main reasons for the increase in slaughter were: A larger lamb crop in 1961, reduction in the number of breeding stock, and a higher proportion of the 1961 lamb crop slaughtered during the year. The farm value of lamb declined steadily from 1951 to 1955; it rose during 1956-58 and declined in 1959, 1960, and 1961.

The sharp decrease in the farm value was accompanied by a 5 percent decrease in the retail price to 65.9 cents per pound in 1961, the lowest since 1956. The farm-retail spread increased 2 percent. The annual average farm-retail spread has not decreased since 1955.

The farmer's share of the consumer's dollar spent for lamb has declined steadily since 1958. It was 48 cents in 1961, the lowest since 1935.

Table 4.--Beef (Choice grade): Live-wholesale and wholesale-retail spreads, by quarters, 1960-61 1/

Quarter	Live-wholesale (per 100 pounds live weight)					Wholesale-retail (per 100 pounds carcass weight)		
	Price of steers 2/	Wholesale value			Spread	Wholesale price 4/	Retail value 5/	Spread
		Carcass 3/	Byproducts	Total				
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1960								
Jan.-Mar.	26.53	27.01	2.19	29.20	2.67	45.78	64.96	19.18
Apr.-June	26.86	27.16	2.33	29.49	2.63	46.03	65.68	19.65
July-Sept.	25.01	25.60	2.25	27.85	2.84	43.39	64.48	21.09
Oct.-Dec.	25.28	25.26	2.21	27.47	2.19	42.81	63.92	21.11
Average	25.92	26.26	2.24	28.50	2.58	44.50	64.80	20.30
1961								
Jan.-Mar.	25.99	26.27	2.23	28.50	2.51	44.52	65.36	20.84
Apr.-June	23.66	24.05	2.38	26.43	2.77	40.77	63.28	22.51
July-Sept.	23.64	23.71	2.47	26.18	2.54	40.18	61.52	21.34
Oct.-Dec.	24.90	24.91	2.35	27.26	2.36	42.22	63.12	20.90
Average	24.55	24.74	2.36	27.10	2.55	41.92	63.36	21.44

1/ Quarterly data for 1949-59 are published in Marketing Costs and Margins for Livestock and Meats, U.S. Dept. Agr., Mktg. Res. Rpt. 418, Nov. 1960, tables 26 and 29.

2/ Weighted average of prices at 20 leading public stockyards.

3/ Wholesale carcass value is 59 percent of average wholesale price of 100 pounds of Choice grade carcass beef.

4/ Weighted average of prices of Choice grade carcass beef in New York, Chicago, Los Angeles, San Francisco, and Seattle.

5/ Calculated from average retail prices of beef cuts in urban areas, published by Bur. Labor Statistics. The retail value per 100 pounds carcass weight is 80 percent of average retail cost of 100 pounds of retail cuts, because about 20 pounds of a 100-pound carcass is fat, bone, and trim which is sold by retailers at nominal prices.

Table 5.--Pork: Live-wholesale and wholesale-retail spreads, by quarters, 1960-61 1/

Quarter	Live-wholesale (per 100 pounds live weight)			Wholesale-retail (per 100 pounds major cuts)		
	Price of hogs 2/	Wholesale value 3/	Spread	Wholesale value 4/	Retail value 5/	Spread
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1960						
Jan.-Mar.	14.27	19.68	5.41	38.02	52.05	14.03
Apr.-June	16.94	21.82	4.88	41.79	55.97	14.18
July-Sept.	17.40	22.65	5.25	42.96	58.94	15.98
Oct.-Dec.	18.00	23.20	5.20	43.49	58.69	15.20
Average	16.65	21.84	5.19	41.56	56.41	14.85
1961						
Jan.-Mar.	18.16	23.29	5.13	43.25	59.34	16.09
Apr.-June	17.46	22.22	4.76	41.09	58.03	16.94
July-Sept.	18.37	23.12	4.75	43.75	59.64	15.89
Oct.-Dec.	17.11	22.16	5.05	41.58	58.51	16.93
Average	17.78	22.70	4.92	42.42	58.88	16.46

1/ Quarterly data for 1949-59 are published in Marketing Costs and Margins for Livestock and Meats, U.S. Dept. Agr., Mktg. Res. Rpt. 418, Nov. 1960, tables 27 and 30.

2/ Average price of 200-220 pound barrows and gilts, Chicago.

3/ Wholesale value at Chicago of 71 pounds of pork and lard obtained from 100 pounds of live hog.

4/ Wholesale value of 100 pounds of major pork cuts at Chicago computed from Livestock Market News and National Provisioner price quotations of individual cuts.

5/ Calculated from average retail prices of major pork cuts in urban areas, published by Bur. Labor Statistics.

Margins for Dairy Products Rise Slightly

The farm-retail spread for dairy products rose again in 1961, as it has each year since 1950. There was a small rise in the farm value and a larger increase in the retail cost. The major causes of the increase in the spread and in retail cost were price increases for butter and cheese. The retail price of American processed cheese in 1961 averaged 36.4 cents per half pound, 2.1 cents more than in 1960. The farm value, however, increased only 0.2 cent, so the farm-retail spread increased 10 percent (tables 19 and 20). Retail prices of cheese increased in late 1960, reflecting a strengthening in demand. Purchases of cheese by the U. S. Department of Agriculture to support the price of manufacturing milk helped to maintain the farm value of milk used in cheese after production caught up with the increased consumption of cheese in 1961. Prices at which the Department bought cheese and nonfat dry milk were raised in September 1960, March and July 1961; prices for butter were increased in September 1960. Much the same situation occurred for butter.

The retail price, farm value, and farm-retail spread for fluid milk averaged about the same in 1961 as in 1960. The farm value of ice cream increased about 3 percent in 1961, while the margin decreased 2 percent. It also decreased in 1959 and 1960.

Farm Value and Retail Price of Frying Chickens Reach New Lows

The annual average farm value of frying chickens (broilers) dropped 16 percent from 1960 to 1961, one of the largest percentage decreases in the last 10 years. The farm value declined from 37.4 cents per retail pound in 1950 to 23.1 cents in 1960 and 19.4 cents last year. The U. S. average price producers received for live birds dropped to 11.7 cents per pound, the lowest price recorded since the reporting of mid-month prices for commercial broilers began in 1940. At the end of the year farm prices strengthened considerably, but were still somewhat below prices a year earlier. Production of broilers was about 10 percent larger in 1961 than in 1960.

The sharp drop in the farm value from 1960 to 1961 was accompanied by a decrease of 4.2 cents in the retail price, slightly more than the decrease in the farm value. From 1950 through 1961 the retail price of frying chickens decreased from 57.0 cents to 38.5 cents per pound. The spread went from 19.6 in 1950 to 21.5 in 1953; after 1953 it declined in every year except 1956. It averaged 19.1 cents last year, compared with 19.6 cents in 1960. Some of the decrease in the spread last year may have been the result of specials in retail stores when fryers were sold at a very small markup or sometimes at a loss.

The farm value of eggs averaged 2 percent lower in 1961 than in 1960, but all of the decrease was absorbed by a higher marketing margin, leaving the retail price about the same. The major reason for the lower farm value was the increase in production above year-earlier levels in the last 4 months of the year. In addition, there has been a downdrift in demand in recent years.

Production of eggs in 1962 is expected to exceed 1961, so prices probably will average lower this year. In recent years the farm-retail spread has tended to change in the opposite direction from the change in farm value. If the farm value declines in 1962, we can expect at least a small increase in the spread.

Little Change for Fruits and Vegetables

Changes in the retail cost, farm value, and farm-retail spread from 1960 to 1961 for the fruits and vegetables group were negligible. Both farm value and retail cost of the fresh vegetables group declined moderately in 1961, reflecting sharply lower prices of potatoes and tomatoes. But increases in retail prices of several canned vegetables, frozen orange concentrate, and canned orange juice raised the retail cost of the processed fruits and vegetables group. Farm values of many processed products also increased in 1961, causing a rise in the total farm value.

The farm value and retail price of potatoes declined 31 percent and 12 percent, respectively, from the relatively high levels of 1960. Supplies of potatoes are considerably larger now than a year ago, and prices, both farm and retail, are expected to continue below a year earlier for several months.

Retail prices and farm values of canned orange juice and frozen orange concentrate averaged considerably higher in 1961. The major reasons apparently were the small inventory of frozen concentrate at the beginning of the 1960-61 season, the late start of the processing season, and the reduction in the Florida Valencia crop, of which 81 percent was processed. Supplies of frozen orange concentrate did not move into trade channels as rapidly in 1961 as in 1960. Stocks at the beginning of the current season were well above a year ago, but about the same as 2 years ago. Demand for processing oranges increased substantially in 1961. An indication of the increase in demand was the proportion of the orange crop which was processed. In 1961, about 67 percent of the crop was processed compared with 64 percent in 1960. Five years ago, 57 percent went into processed products.

The pack of canned single strength orange juice was considerably smaller in 1961 than in 1960, which largely explains the increase in retail price and farm value. Increased demand for oranges for frozen concentrate helped to increase prices of oranges for canned juice.

The higher retail prices and farm values of canned orange juice and frozen concentrate did not affect the farm-retail spreads appreciably.

Prospects for 1962 include a larger 1961-62 orange crop. Major freeze damage occurred in Texas, but production there represents only 3 percent of total U. S. production. Some damage was reported in Florida. More important probably was the damage to grapefruit in Texas, which accounts for about 14 percent of the total U. S. crop. Indications are that the volume of citrus fruit moving into fresh channels from Texas will be negligible the rest of this year. Some of the damaged fruit in Texas and Florida has been salvaged for processing, but no accurate estimate of the volume salvaged is available at this time.

The freeze in Texas also will affect supplies of cabbage, carrots, lettuce, and some other crops. During the winter, large quantities of these crops are shipped from Texas and prices will be relatively high within the next few months. In some areas replanting was possible. Supplies of tomatoes from Florida probably will be reduced some, but the main effect of the cold weather is the delay in maturing.

Small Increase in Margin for Bakery and Cereal Products in 1961

The farm-retail spread for the bakery and cereal products group has increased each year since 1941. The 1-percent rise in 1961 was smaller than those in most recent years. The retail cost of this group rose 2 percent in 1961, and the farm value increased 5 percent. The increase in the farm value was caused

by a small increase in the price of wheat plus a moderate increase in the farm value of "other ingredients" used in bakery products. These other ingredients include sugar, lard, shortening, milk, and eggs.

The farm value of a 1 pound loaf of bread increased to 2.9 cents in 1961 from 2.8 cents in 1960. At the same time the retail price increased to 20.9 cents from 20.3 cents, which meant that the spread increased to 18.0 from 17.5 cents. Most of the increase in the spread was in the retail store segment, but other segments also increased (table 6).

The farm value of corn flakes and corn meal increased as the result of a sharp increase in the price of white corn. Retail price of corn flakes increased more than the farm value, causing a 1 percent rise in the farm-retail spread. The spread for corn meal declined, as the retail price increased less than the farm value.

Higher Prices for Soybeans and Cottonseed Boost Farm Value of Fats and Oils

The farm value of the fats and oils products in the market basket jumped 22 percent from 1960 to 1961 -- the largest increase for any of the product groups. This increase accompanied sharp rises in prices farmers received for soybeans and cottonseed and moderately higher prices for hogs. The total retail cost of the fats and oils products group increased about as much as the farm value, so the total farm-retail spread scarcely changed.

Prices farmers received for soybeans rose sharply above year-earlier levels in the first part of 1961, reflecting small U. S. supplies and reduced shipments of Chinese soybeans into export markets. The 1961 crop is being supported at $2.30 per bushel compared with $2.21 for the 1960 crop. The higher price for soybeans helped to strengthen the price of cottonseed in 1961. Federal price supports were $11 more per ton for the 1961 cottonseed crop than for the 1960 crop.

Table 6.--White pan bread: Estimated retail and wholesale prices of a 1-pound loaf, retailer, baker-wholesaler, miller, and other gross margins and estimated farm value of ingredients, average 1947-49, annual 1950-61, and quarterly 1960-61 1/

Year and quarter	Retail price 2/	Retail margin 3/	Wholesale price 4/	Baker-wholesaler margin 5/	Cost to baker: All ingredients 6/	Cost to baker: Flour 7/	Mill sales value of flour 8/	Miller's flour margin 9/	Cost of wheat to miller 10/	Other margins 11/	Farm value: Wheat 12/	Farm value: All ingredients 13/
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
1947-49 average	13.5	2.4	11.1	6.0	5.1	3.5	3.4	0.6	2.8	1.2	2.7	3.3
1950	14.3	2.7	11.6	6.9	4.7	3.4	3.3	.6	2.7	1.1	2.5	3.0
1951	15.7	2.7	13.0	7.8	5.2	3.6	3.4	.6	2.8	1.3	2.6	3.3
1952	16.0	3.0	13.0	8.1	4.9	3.5	3.4	.6	2.8	1.1	2.6	3.2
1953	16.4	2.9	13.5	8.4	5.1	3.7	3.5	.6	2.9	1.4	2.5	3.1
1954	17.1	2.7	14.4	8.9	5.5	4.0	3.8	.6	3.2	1.6	2.7	3.3
1955	17.5	2.6	14.9	9.5	5.4	4.0	3.8	.6	3.2	1.6	2.7	3.2
1956	17.9	2.6	15.3	10.0	5.3	3.9	3.7	.7	3.0	1.4	2.6	3.2
1957	18.8	3.1	15.7	10.3	5.4	3.9	3.7	.8	2.9	1.4	2.6	3.2
1958	19.3	3.1	16.2	10.9	5.3	3.9	3.6	.8	2.8	1.6	2.3	2.9
1959	19.7	3.1	16.6	11.5	5.1	3.8	3.5	.8	2.7	1.5	2.3	2.8
1960	20.3	3.4	16.9	11.6	5.3	3.9	3.6	.9	2.7	1.6	2.3	2.8
1961	20.9	3.8	17.1	11.7	5.4	4.0	3.7	1.0	2.7	1.5	2.4	2.9
1960												
Jan.-Mar.	19.9	3.2	16.7	11.5	5.2	3.8	3.5	.8	2.7	1.6	2.3	2.8
Apr.-June	20.1	3.4	16.7	11.4	5.3	3.9	3.6	.9	2.7	1.6	2.3	2.8
July-Sept.	20.5	3.5	17.0	11.7	5.3	3.9	3.6	1.0	2.6	1.5	2.3	2.8
Oct.-Dec.	20.8	3.7	17.1	11.8	5.3	3.9	3.6	1.0	2.6	1.5	2.3	2.8
1961												
Jan.-Mar.	20.9	3.8	17.1	11.8	5.3	3.9	3.6	1.0	2.6	1.4	2.4	2.9
Apr.-June	20.9	3.8	17.1	11.7	5.4	3.9	3.7	1.0	2.7	1.5	2.3	2.9
July-Sept.	20.9	3.8	17.1	11.6	5.5	4.0	3.8	1.0	2.8	1.5	2.4	3.0
Oct.-Dec.	21.0	3.9	17.1	11.6	5.5	4.1	3.8	.9	2.9	1.6	2.4	3.0

1/ The retail price, farm value, and farm-retail spread or marketing margin for the years 1919-56 were published in Farm-Retail Spreads for Food Products, U.S. Dept. of Agr., Misc. Pub. 741, Nov. 1957, p. 117. Comparable data for the other series in this table are not available for the years before 1947.

2/ Average of retail prices in urban areas reported by BLS, with adjustments for 1954 and 1955.

3/ Spread between retail and wholesale prices.

4/ Derived from wholesale prices published by the BLS and trade data.

5/ Spread between wholesale price and cost to the baker of all ingredients.

6/ Cost of flour, shortening, nonfat dry milk, sugar, and other ingredients in a pound of bread, adjusted to level of cost to baker as reported in the Census of Manufactures.

7/ Weighted average wholesale value of 0.641 lb. of several types of bread flour in 5 markets, adjusted to the level of cost to baker as reported in the Census of Manufactures.

8/ Weighted average wholesale value of 0.641 lb. of several types of bread flour in 5 markets, adjusted to mill sales level as reported in the Census of Manufactures.

9/ Spread between cost of wheat to miller and sales value of flour.

10/ Weighted average wholesale value in 6 markets of major classes and grades of wheat used for milling bread flour, adjusted to level of cost to miller as reported in the Census of Manufactures and further adjusted to eliminate imputed value of millfeed products.

11/ Margins for transporting, handling, and storing all ingredients and for processing ingredients other than flour. This margin is a residual figure.

12/ Payment to farmers for wheat less imputed value of millfeed byproducts, based on average price received by farmers for all wheat; payment for 0.882 lb. since July 1957.

13/ Value at prices received by farmers, less byproduct allowances, for the quantity of wheat and other farm products yielding ingredients used in a pound loaf of white bread.

Data for 1954 and later years in several columns have been revised since this table was last published. Adjustments to data given in the 1958 Census of Manufactures have been made in the cost of flour and other ingredients to the baker, the mill sales value of flour, and cost of wheat to the miller. A change has been made in the extraction rate for 1957 and later years.

Economic Research Service.

THE FOOD MARKETING INDUSTRIES - RECENT CHANGES AND PROSPECTS 1/

Rising consumer incomes and the movement of people from farms to cities have increased the demand for processed foods. Technological innovations have made these foods available at competitive prices. As a result, the output of processed food products in this country is growing faster than population. Greater average capacity per plant has enabled the increased output to be produced by a declining number of food processing plants and firms. Adoption of new technology has been a major force in reducing the number of plants and increasing the average size of plant.

Many types of wholesalers move products from farmers to processors and retailers. These include firms that assemble and handle raw farm products, merchant wholesalers (including both general and specialty line grocery wholesalers), manufacturers' sales branches, brokers and agents. Assemblers of farm products increased their sales and the number of establishments from 1954 to 1958, after a decline from 1948 to 1954. In the wholesale grocery field, sales of general line merchant wholesalers affiliated with groups of retail food stores more than doubled from 1948 to 1958. This trend contrasts sharply with the decline in sales of the nonaffiliated general line grocery wholesalers.

Total sales of grocery stores rose by three-fourths from 1948 to 1958, but the number of stores dropped by more than a fourth. Both chain and independent grocery stores decreased in number. The number of grocery stores with an annual sales volume of less than $100,000 declined sharply, but those grossing more than $1 million multiplied fourfold. Chains with 11 or more stores increased their share of total grocery store sales to 44 percent in 1958, up from 34 percent in 1948, and 33 percent in 1939. The most rapid growth was made by chains with 100 or fewer stores. In 1958 about two-fifths of total grocery store sales were made by stores that were members of retail groups either cooperatively owning a wholesale house or sponsored by a wholesaler. Thus, independent grocery stores not affiliated with a wholesaler had only about a fifth of total sales.

The food marketing industries have made many technological changes since World War II. One significant result has been an increase in the scale of marketing establishments--many large food manufacturing plants and retail stores have been built, and many small establishments have been closed. Output of marketing services has increased in total and per man-hour, largely because of improvements in marketing facilities. Investments in marketing facilities have been large. Marketing firms have processed and distributed an increasing volume of products, many of which are new.

1/ Prepared by Forrest E. Scott and Stephen J. Hiemstra, agricultural economists, Marketing Economics Divisions, Economics Research Service.

Farmers are vitally affected by the organization and operation of the markets for the products they produce. They and their representatives are interested in changes in concentration of processing, wholesaling and retailing activities. If these activities are performed or controlled by a small number of firms, imperfect pricing and procurement practices may be encouraged and the bargaining power of farmers may be impaired. Some of the criteria useful in appraising this situation include: (1) The numbers and sizes of firms in relation to the size of the markets they serve, (2) the closeness of substitution among products and alternative sources of supply facing consumers, and (3) the ease or difficulty of new or competing firms entering a given market. Census data for 1958 and other recently published statistics make possible a new look at some of these factors. 2/

Food Processing

Output of Manufactured Foods Grows Faster Than Population

Industries processing food products originating on farms have grown at a faster rate since 1947 than before World War II. Output of these industries increased at an average annual rate of 2.6 percent from 1947 to 1960. 3/ This rate compares with 1.9 percent from 1909 to 1939. In 1960, output of these industries was 35 percent larger than the average for 1947-49 (table 7). The average increase, however, was considerably smaller for the food processing industries than for all manufacturing industries, for which output averaged 63 percent larger in 1960 than in 1947-49, according to the Federal Reserve Board Index of Industrial Production.

The increase in output of the food processing industries resulted mainly from the growth in population and the shift of people from farms to cities. The resident urban population of the 48 contiguous States was 32 percent larger in 1960 than the 1947-49 average. This increase compares with a rise of 23 percent in the total resident population.

Increasing dependence of consumers on purchased foods was one of several factors that caused the output of the food processing industries to grow faster than population. It is estimated that home-produced food accounted for 7 percent of the total value of all foods consumed by civilian consumers in this country in 1959, compared with about 13 percent in 1947. 4/ This change was largely associated with the decrease in farm population. Production by farm families

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2/ An article also entitled "The Food Marketing Industries - Recent Changes and Prospects" covering many of the same topics discussed in the present article was published in the November 1957 issue of The Marketing and Transportation Situtation.

3/ The index of total output by the food industries (table 7) is affected by changes in processing per unit of raw material as well as by changes in the physical volume of output. The over-all index and group indexes were constructed by weighting annual physical output data for individual industries by estimates of "value added in manufacture," based on data from the Census of Manufactures. An industry that does more processing per unit of product has a larger value added per unit of product and thus has a greater effect on the over-all index than an industry that does less processing per unit.

4/ Burk, Marguerite C., Measures and Procedures for Analysis of U. S. Food Consumption, U. S. Dept. Agr., Agr. Handbook 206, June 1961, table 3.4, pp. 40.

Table 7.--Output of domestic farm-food processing industries, 1947-60 1/

Industry and industry group 2/	1947-49 = 100													
	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
All factory processed farm foods	101	98	101	104	106	108	112	114	119	125	126	128	132	135
Meat products	105	96	99	101	100	105	113	116	125	130	124	118	127	131
Poultry and processed eggs	92	88	120	146	164	185	207	242	246	301	320	362	392	413
Dairy products	101	98	100	102	102	105	108	112	116	121	124	125	126	128
Creamery butter	101	92	107	105	90	89	105	108	103	105	105	103	99	103
Natural cheese	101	95	104	104	103	104	117	121	121	126	128	128	128	136
Concentrated milk	103	103	93	92	86	86	86	87	88	91	93	92	92	93
Ice cream and frozen desserts	110	98	93	91	91	92	92	90	95	99	101	103	111	112
Processed fruits and vegetables	97	99	104	106	124	122	129	128	135	151	145	146	153	155
Canned fruits and vegetables	98	100	102	104	118	110	115	114	118	130	126	127	130	130
Frozen fruits and vegetables	80	99	122	158	184	221	270	265	301	359	341	322	383	416
Pickles and sauces 3/	98	99	103	97	137	147	146	151	167	186	177	190	181	196
Grain mill products	106	102	92	91	95	96	95	96	96	100	103	107	109	111
Flour and meal	109	103	89	88	92	93	92	92	93	96	102	105	107	109
Cereal products	101	101	99	98	98	99	99	98	101	103	106	109	110	110
Rice milling	95	99	105	98	120	117	115	126	98	122	106	106	121	128
Bakery products	99	100	102	103	106	106	106	105	107	111	114	118	119	121
Sugar	109	90	100	122	92	96	110	118	103	113	122	124	132	134
Raw cane 4/	86	105	110	114	81	111	110	101	95	93	88	96	103	103
Beet	116	86	98	125	95	92	110	123	105	119	132	133	141	144
Miscellaneous products	98	97	105	112	110	116	122	126	133	136	139	146	160	165
Shortening and cooking oil	89	98	113	116	113	122	131	139	147	153	157	166	191	201
Margarine	92	108	99	104	111	132	128	129	126	130	139	149	153	161
Corn wet milling	111	91	98	111	105	103	110	110	116	117	118	123	131	129

1/ For a description of data and methods used in constructing these indexes see Waldorf, William H., Output of Factories Processing Farm Food Products in the United States, 1909-1958, U.S. Dept. Agr., Tech. Bull. 1223, Sept. 1960.

2/ The index for all factory processed farm foods covers the output of the confectionery industry in addition to that of the industry groups listed below. Industry groups that include industries not shown below and the industries not shown are: Meat products - Meat packing, prepared meats; dairy products - fluid milk, special dairy products; processed fruits and vegetables - dehydrated fruits and vegetables; grain mill products - blended and prepared flour; bakery products - bread and related products, biscuits, and crackers, miscellaneous products - leavening compounds, wet corn milling, flavorings, macaroni and spaghetti, and peanut butter.

3/ Covers output of plants manufacturing salad dressing.

4/ Index covers output of raw cane sugar mills and estimates of output of refined domestic cane sugar.

accounted for 75 percent of the total value of home-produced foods in 1959, down from 82 percent in 1947. 5/ This decline reflects the increased dependence of farm families on purchased foods as well as the drop in farm population. Much of the home-produced food consisted of meat products, dairy products, processed fruits and vegetables, and other products similar to those produced by the food manufacturing industries. Estimates of the value of home-produced food do not include the value of food products made in the home from purchased raw materials, for example, bread made from purchased flour. Home baking, canning, and other processing of foods from purchased raw materials also has declined in recent years.

In earlier years, many farmers processed food products for sale. By 1947, however, these products made up only a little more than 1 percent of the total value of food products produced by farmers, so the continued decline in sales of farm-processed products has accounted for little of the growth in the output of the food processing industries since 1947. 6/

The volume of food products processed in retail and wholesale establishments probably has decreased since 1947. In earlier years, many operators of retail butcher shops did some slaughtering of meat animals and poultry. Until a decade or so ago, much of the poultry consumed by nonfarm families was slaughtered in retail and wholesale establishments. The big jump in output of industries processing poultry and eggs (table 7) reflects in part the rapid increase in the production of broilers and turkeys since 1947. But it also reflects the shift of slaughtering from establishments that mainly engaged in retail and wholesale trade to establishments that specialized in slaughtering and dressing poultry. It is likely that baking in retail bakeries has declined in recent years, and a smaller volume of ice cream now is made in retail stores. 7/

Consumers now are buying more highly processed products than in earlier years. For example, they are more likely to buy bread than flour. Thus, the consumer buys a product that has been processed by two industries rather than one. The larger increase in output shown in recent years by the bakery industry compared with the flour and meal industry reflects this change (table 7). The proportion of their fruits and vegetables that consumers buy in processed form has increased. In 1958, commercially processed products (canned, frozen, and dried) accounted for 49 percent of the consumption of fruits and vegetables (fresh-weight equivalent basis) compared with 38 percent in 1947. 8/ The use of processed potatoes has increased greatly. In 1960, about 25 percent of the potatoes marketed for food were sold to consumers in processed form, compared with 14 percent 4 years earlier.

The output of convenience foods has climbed steadily in recent years. In 1959, the food industries produced more than a billion pounds of frozen prepared foods -- double the volume 5 years earlier. Output of many other convenience foods has made big gains. These foods are used widely in homes and in restaurants and other eating places. Many operators of eating places buy portion-control meats that have been prepared in portions of equal size and other products

5/ Burk, Marguerite C., Trends and Pattern in U. S. Food Consumption, U. S. Dept. Agr., Agr. Handbook 214, June 1961, table 6.2, pp. 91.

6/ Burk, Marguerite C., Consumption of Processed Foods in the United States, U. S. Dept. Agr., Mktg. Res. Rpt. 409, June 1960, table 1, pp. 9.

7/ The number of retail bakeries with baking on the premises enumerated in the Census of Retail Trade declined from 15,686 in 1948 to 11,901 in 1958. Some of the establishments enumerated in 1948 may not have had paid employees, and for that reason, would not have been enumerated in 1958.

8/ Waldorf, William H., Output of Factories Processing Farm Food Products in the United States, 1909-58, U. S. Dept. Agr., Tech. Bul. 1223, table 10, p. 25.

that have received extra processing. Rising labor costs have caused some restaurants to buy the more highly processed foods rather than do the processing themselves. Although convenience foods are substituted mainly for other processed foods, they required more processing per unit than most of the food they replace, so the substitution increases the output of food processing services.

Some of the food industries surged ahead much faster than others. Output of the poultry and processed eggs industry was five times as large in 1960 as in 1947-49. The frozen fruits and vegetables industry had a fourfold increase, and output of the pickles and sauces and shortening and cooking oil industries doubled. Among the industries whose output increased less than the average were those producing flour and meal, cereal products, bakery products, and ice cream and frozen desserts (table 7). Output of the creamery butter and raw cane sugar industries was about the same in 1960 as in 1947-49. The concentrated milk industry had a smaller output in 1960 than in 1947-49. 9/

The postwar recessions had little, if any, effect on the output of the food industries. In 1949, the first postwar recession year, output was slightly larger than in 1948. The downturn in business in 1948 came too late to account for the slight decrease in output that year. During the 1953-54, 1957-58, and 1960-61 recessions, output continued to grow.

Prospective Trends

Continued growth in output of the food processing industries is in prospect, mainly because of population expansion. But some factors that have caused output to increase faster than population will contribute less to growth in the years ahead. Farm processing of food products for sale and processing in retail and wholesale establishments have already declined to such an extent that further decreases will scarcely affect the food processing industries. Movement of farm families to nonfarm homes will continue to swell the demand for the output of these industries, but perhaps not as much as in recent years. Farm families are buying a larger part of their food now, so movement to off-farm homes causes less increase in purchases of food.

The output of processed foods will continue to grow faster than the population. Consumers will continue to substitute processed foods for unprocessed foods and highly processed for less highly processed foods. Technological improvements in processing, such as dehydrofreezing, freeze drying, dehydration, and asceptic canning, will increase sales of processed products. Further increases in consumer incomes, improvements in quality, and spreading knowledge of these products are expected to increase the use of convenience foods.

Fewer Plants in Food Processing Industries

The total number of plants in the food and kindred products group of industries has been declining for about three decades. 10/ In the 28 industries whose primary products are foods manufactured from domestic farm-produced raw materials, 26,547 plants were enumerated in 1958, down from 27,795 in 1954 and 29,630 in 1947 (table 8). 11/

9/ Includes plants manufacturing condensed and evaporated milk, nonfat dry milk, and related products.

10/ Census data are for establishments, which generally are plants. An establishment "is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry."

11/ These 28 industries are all in the food and kindred products group. This group includes 17 additional industries whose primary products are beverages, confectionery products, ice and other nonfoods, seafoods, and other foods produced from nonfarm raw materials. The total given for 1947 includes fluid milk plants enumerated in 1948 instead of 1947.

Table 8 .--Food manufacturing industries: Number of companies and establishments, value shipments, and value added by manufacture, 1958, 1954, and 1947 1/

Industry	Companies			Establishments			Value of shipments			Value added by manufacture, adjusted 2/		
	1958	1954	1947	1958	1954	1947	1958	1954	1947	1958	1954	1947
	Number	Number	Number	Number	Number	Number	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.
Meat products												
Meat packing plants	2,646	2,228	1,999	2,801	2,367	2,154	11,962	10,265	8,970	1,747	1,397	977
Prepared meats	1,430	1,254	---	1,494	1,316	3/1,264	2,066	1,541	3/ 1,601	442	334	3/235
Poultry dressing plants	1,095	1,189	330	1,233	1,309	553	1,888	1,332	479	311	207	68
Dairy products												
Fluid milk	5,157	6,250	---	5,817	6,689	4/6,616	6,436	4,866	4/3,704	1,999	1,515	---
Creamery butter	990	1,172	1,482	1,058	1,262	1,904	1,023	1,014	1,006	147	142	138
Natural cheese	1,026	1,220	1,313	1,203	1,419	1,738	684	581	469	109	92	65
Condensed and evaporated milk	161	166	182	313	359	451	821	703	781	203	165	157
Ice cream and frozen deserts	1,167	1,375	1,273	1,382	1,587	1,690	947	773	773	393	335	280
Special dairy products	97	162	97	107	187	139	189	342	293	24	53	48
Canning, preserving and freezing 5/												
Canned fruits and vegetables	1,315	1,461	---	1,607	1,758	2,265	2,227	2,229	1,641	808	850	609
Dehydrated fruits and vegetables	130	119	120	161	148	146	273	195	51	76	56	18
Pickles and sauces 6/	566	642	637	619	717	742	525	503	358	165	143	121
Frozen fruits and vegetables	347	215	---	426	266	291	1,026	435	155	324	169	59
Canned specialties 7/	93	---	---	107	---	---	847	---	---	341	---	---
Grain mill products												
Flour and meal	703	692	1,047	814	803	1,243	2,089	2,002	2,527	395	331	411
Cereal preparations	23	37	55	43	46	64	444	366	285	243	177	130
Rice milling	61	65	75	73	80	88	325	274	225	57	44	43
Blended and prepared flour	112	123	115	117	131	123	279	267	78	118	106	24
Wet corn milling	53	54	47	59	58	55	529	464	460	249	179	127
Bakery products												
Bread and related products	5,305	5,470	5,985	5,985	6,103	6,796	4,099	3,345	2,404	2,111	1,637	1,098
Biscuits and crackers	280	---	---	334	311	326	981	807	540	522	420	265
Sugar												
Raw cane sugar	45	43	77	50	49	82	73	65	60	22	18	18
Cane sugar refining	16	16	17	28	23	25	997	867	818	185	133	98
Beet sugar	15	15	17	66	65	74	392	301	263	130	114	118
Fats and oils												
Cottonseed oil mills	125	145	172	214	286	315	421	592	518	64	112	105
Soybean oil mills	82	55	105	117	88	133	1,081	877	586	140	107	105
Shortening and cooking oils 8/	62	---	---	105	135	127	1,239	1,154	1,099	222	228	206
Miscellaneous industries												
Macaroni and spaghetti	205	226	219	214	233	226	180	155	112	67	53	42

For footnotes and source see p. 21.

Footnotes to table 8.

1/ For some industries data for 1958 are not strictly comparable with those for 1954 and 1947. Because of a change in industry definitions, some industries include plants with types of activities not included in the earlier years and some do not include plants previously included. The tabulation below shows 1958 data for establishments classified according to the industrial classification system used for the 1954 Census; data are shown only for those industries for which changes in industry definitions caused significant differences:

Industry	Establishments	Value of shipments	Value added by manufacture, adjusted
	Number	Mil. dol.	Mil. dol.
Poultry dressing plants	1,131	1,685	266
Natural cheese	1,290	764	127
Condensed and evaporated milk	296	784	180
Special dairy products	203	273	61
Canned fruits and vegetables	1,652	a/ 3,023	1,243
Pickles and sauces	705	a/ 646	203
Frozen fruits and vegetables	303	a/ 690	219
Biscuits and crackers	299	954	506

a/ Value of production

2/ Adjusted value added for 1954 and 1958; unadjusted value added for 1947. Adjusted value added "equals value of shipments (including resales of finished products) less cost of finished products, materials, supplies, fuel, electrical energy, and contract work, plus the net change in value of inventories of finished products and work-in-process between the beginning and end of the year, without adjustment for price changes." Unadjusted value added does not include the value of resales of finished products and no deduction is made for their costs, nor does it include the net change in the value of inventories.

3/ Includes manufacturers' wholesale branches that manufactured prepared meats.

4/ Data for 1948.

5/ Except for the dehydrated fruits and vegetables industry, data are given for value of production rather than value of shipments.

6/ Includes plants manufacturing pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings.

7/ Includes baby foods, soups (except sea food soups), "native foods," health foods, and other canned specialties.

8/ Includes data for margarine.

Compiled from Census of Manufactures, 1958, 1954, and 1947.

The number of plants declined in 19 of the 28 food processing industries. Industries with the largest percentage reductions in plants from 1947 to 1958 were: Creamery butter (44 percent), raw cane sugar (39 percent), flour and meal (35 percent), condensed and evaporated milk (34 percent), cereal products (33 percent), and cottonseed oil (32 percent). (In comparing the number of plants data given in footnote 1 to table 8 were used where available. For some industries, data for 1958 are not strictly comparable with those for 1954 and 1947). Of the 19 industries that had fewer plants in 1958 than in 1947, more than half showed decreases in both 1954 and 1958. But in four industries--flour and meal, raw cane sugar, beet sugar, and soybean oil--all of the decrease was between 1947 and 1954. In the other four industries that had fewer plants in 1958 than in 1947, all of the decrease came between 1954 and 1958. These industries were: Fluid milk, blended and prepared flour, shortening and cooking oil, and macaroni and spaghetti.

In 8 of the 28 food processing industries, the number of plants was larger in 1958 than in 1947. Percentage increases were largest for the following: Poultry dressing plants (105 percent), special dairy products (46 percent), and meat packing plants (30 percent). Of these 8 industries, 5 showed increases in both 1954 and 1958: Meat packing, prepared meats, special dairy products, wet corn milling, and dehydrated fruits and vegetables. In the frozen fruits and vegetables and cane sugar refining industries, decreases from 1947 to 1954 were more than offset by increases from 1954 to 1958. After more than doubling from 1947 to 1954, the number of poultry dressing plants declined about 14 percent from 1954 to 1958.

The classification for the canned specialties industry first appeared in the 1958 Census tabulations (table 8). In earlier enumerations, plants included in this classification were counted in other industries, mostly in the canned fruits and vegetables industry.

Output increased in all of the industries that had more plants in 1958 than in 1947, except possibly in the special dairy products and dehydrated fruits and vegetables industries. Output of poultry processing plants--the industry that had the biggest percentage increase in number of plants--was about four times as large in 1958 as in 1947 (table 7). 12/ Increased output of dehydrated potatoes, a relatively new product, may have caused the growth in the number of plants in the dehydrated fruits and vegetables industry.

Slow growth or decreases in output accounted. at least partially, for the reduction in the number of plants in a few industries. Output of the cereal products industry increased 8 percent from 1947 to 1958--much less than the average for all the food processing industries--with the number of cereal products plants decreasing by a third. Output of the condensed and evaporated milk industry (also known as the concentrated milk industry) was 11 percent smaller in 1958 than in 1947 and the number of plants in the industry decreased 34 percent. Other industries that had fewer plants in 1958 than in 1947 and a decrease or only a slight increase in output were: Creamery butter, ice cream and frozen desserts, flour and meal, and bread and related products. 13/

12/ This industry includes plants that dry, freeze, and break eggs as well as plants that process poultry, rabbits, and small game.

13/ The indexes of output given in table 7 were used where available in comparing changes in output and in plant number. It is not always possible to ascertain from Census data whether output of an industry increased or decreased. The value of shipments (or -- for a few industries -- the value of production) is the only figure given by the Census relating specifically to the output of an industry. These figures reflect price changes and shipments between plants as well as changes in final physical output. The Census provides physical quantity data for most individual products, but these data cover shipments by plants in industries other than the industry for which the product is a primary product.

Technological change was a major cause of the decrease in number of plants. Many food processing firms have built new plants or have installed new equipment and modernized and enlarged existing plants. In some instances improved, new equipment and processes were suitable only for a relatively large plant. Moreover, since a company generally builds a plant or installs equipment to accommodate an expected increase in output, new or modernized plants were often bigger than the plants they replaced. Because of the increase in the number of large plants, products could be turned out by fewer plants.

Many older and smaller plants were closed because they could not compete successfully with the newer and larger plants. Generally, the newer plants had lower unit costs of production than the older ones and sometimes their products were superior in quality. Though large plants generally would ship products farther than small plants, apparently economies of scale in most instances more than offset greater distribution costs. Overcapacity in some industries caused by building and modernization of plants made competition for the smaller, older plants more difficult. Shortage of capital, an inadequate or uncertain supply of raw materials, and other unfavorable prospects caused many plants to be closed rather than modernized. 14/

Mergers of companies accounted for part of the reduction in plant numbers. Companies formed by mergers often concentrated production in their most efficient plants and closed their least efficient plants, frequently the smaller ones. Many food processing companies have merged since 1947. A survey of 598 companies in the dairy products; canning, preserving, and freezing; baking; and vegetable and animal oils industries was conducted covering the years 1952-58. Out of this total, 139 companies reported acquisitions from other companies, 28 reported disposals, and 23 reported both acquisitions and disposals. 15/

The increase in average capacity per plant, caused by the building of large plants and closing of small ones, is indicated by the increase in average output per plant in most food processing industries from 1947 to 1958. Total output increased during this period in all but 3 or 4 of the 19 industries in which the number of plants decreased. In 3 industries in which output declined -- condensed and evaporated milk, ice cream and frozen desserts, and flour and meal -- the number of plants decreased by a larger percentage than the decrease in total output. In 2 of the 8 industries in which the number of plants increased -- poultry dressing and frozen fruits and vegetables -- total output increased by a much larger percentage than the increase in the number of plants. Output in the wet corn milling industry expanded by a slightly larger percentage than the increase in the number of plants. But in the meat packing and prepared meats industries the number of plants increased by a larger percentage than output. Data on output are not available for 3 of the 8 industries.

More Large Plants

In the 21 industries for which comparable data are available for 1947 and 1958, the number of large plants (those having from 100 to 500 employees) increased 24 percent (table 9). There were also a few more very large plants (500 or more employees). But the number of medium-size plants (20-99 employees) decreased 13 percent and small plants (1-19 employees) 3 percent.

Of the total number of plants in these 28 industries, 12 percent were in the

14/ Technological developments affecting changes in the number of plants in the individual food processing industries were discussed more fully in the article cited in footnote 2.

15/ Nelson, Paul E. Jr. and Paul, Allen B., Ownership Changes by Purchase and Merger in Selected Food Industries, U. S. Dept. Agr., Mktg. Res. Rpt. 369, Oct. 1959.

Table 9 .--Number of food manufacturing establishments, by size of work force 1958, 1954, and 1947.

Industry and year	Total establishments	Establishments with an average of -			
		1-19 employees	20-99 employees	100-499 employees	500 or more employees
	Number	Number	Number	Number	Number
Meat packing plants					
1958	2,801	1,824	668	231	78
1954	2,367	1,434	627	220	86
1947	2,153	1,321	559	187	86
Prepared meats					
1958	1,494	998	374	116	6
1954	1,316	881	332	97	6
1947	1,264	753	429	74	8
Poultry and dressings					
1958	1,233	639	388	203	3
1954	1,309	816	348	144	1
1947	557	248	265	43	1
Canned fruits and vegetables					
1958	1,607	694	627	266	20
1954	1,758	760	715	254	29
1947	2,265	1,027	926	285	27
Dehydrated fruits and vegetables					
1958	161	94	41	25	1
1954	148	84	42	21	1
1947	146	96	40	10	---
Pickles and sauces					
1958	619	414	157	47	1
1954	717	497	161	58	1
1947	743	494	200	46	3
Frozen fruits and vegetables					
1958	426	163	138	111	14
1954	266	98	104	59	5
1947	291	111	128	51	1
Flour and meal					
1958	814	564	171	75	4
1954	803	543	175	80	5
1947	1,243	860	284	93	6
Cereal preparations					
1958	43	18	11	9	5
1954	46	19	13	8	6
1947	64	34	14	10	6
Rice milling					
1958	73	21	43	9	---
1954	80	22	51	7	---
1947	88	29	49	10	---
Blended and prepared flour					
1958	117	87	18	10	2
1954	131	97	21	11	2
1947	122	91	23	8	---
Wet corn milling					
1958	59	33	12	5	9
1954	58	37	9	3	9
1947	55	34	9	4	8
Bread and related products					
1958	5,985	3,836	1,441	665	43
1954	6,103	4,079	1,371	611	42
1947	6,797	4,478	1,747	534	38
Biscuit and crackers					
1958	334	131	115	61	27
1954	311	143	78	62	28
1947	326	139	84	78	25
Raw cane sugar					
1958	50	6	37	7	---
1954	49	6	37	6	---
1947	82	19	49	14	---

Continued

Table 9 .--Number of food manufacturing establishments, by size of work force 1958, 1954, and 1947.--Continued

Industry and year	Total establishments	Establishments with an average of -			
		1-19 employees	20-99 employees	100-499 employees	500 or more employees
	Number	Number	Number	Number	Number
Cane sugar refining					
1958	28	3	5	6	14
1954	23	---	4	5	14
1947	25	1	3	6	15
Beet sugar					
1958	66	---	10	55	1
1954	65	---	5	59	1
1947	74	---	8	65	1
Shortening and cooking oils					
1958	105	25	36	41	3
1954	135	54	34	45	2
1947	127	55	37	33	2
Cottonseed oil mills					
1958	214	51	151	12	---
1954	286	48	219	19	---
1947	315	53	246	16	---
Soybean oil mills					
1958	117	34	66	15	2
1954	88	19	50	18	1
1947	133	55	63	14	1
Macaroni and spaghetti					
1958	214	138	55	21	---
1954	233	149	64	20	---
1947	226	135	69	21	1
Total					
1958	16,560	9,773	4,564	1,990	233
1954	16,292	9,786	4,460	1,807	239
1947	17,096	10,033	5,232	1,602	229
Creamery butter					
1958	1,058	830	203	25	---
1954	1,262	1,014	216	32	---
Natural cheese					
1958	1,203	1,043	149	11	---
1954	1,419	1,237	176	6	---
Condensed and evaporate milk					
1958	313	111	171	31	---
1954	359	167	163	29	---
Ice cream and frozen desserts					
1958	1,382	928	394	59	1
1954	1,587	1,110	418	55	4
Special dairy products					
1958	107	72	25	10	---
1954	187	126	45	15	1
Fluid milk					
1958	5,817	3,580	1,723	491	24
1954	6,689	4,678	1,579	412	20
Total					
1958	9,880	6,564	2,665	627	25
1954	11,503	8,332	2,597	549	25

Compiled from Census of Manufactures, 1958, 1954, and 1947.

large plant group in 1958, compared with 9 percent in 1947. Plants in the very large plant group represented between 1 and 2 percent of the total in 1958, about the same proportion as in 1947. The medium-size group accounted for about 28 percent of the total number in 1958, down from about 31 percent in 1947. Small plants -- the largest group -- made up about 59 percent of the total in both years.

Though more than half of the total number of plants in these 28 industries were small, plants in this group accounted for only about 6 percent of the total value added by manufacture in 1958; medium-size plants accounted for about 21 percent of the total; large plants, 44 percent; and very large plants, 29 percent. Compared with 1947, the percentage in 1958 was the same for small plants, slightly smaller for medium-size plants, and slightly larger for large and very large plants.

The number of small plants decreased in each of the 6 dairy products industries from 1954 to 1958, and the number of medium-size plants declined in 4. But in 4 out of the 6, the large plants increased. Comparable 1947 data are not available for these industries. Twenty-five plants, or less than 1 percent, in these 6 industries were in the very-large-plant group in both 1947 and 1958. The large-size group accounted for 6 percent of the total plants in 1958, compared with about 5 percent in 1954; the medium-size group had 27 percent in 1958 and about 23 percent in 1954. The proportion in the small size group decreased to 66 percent in 1958 from 72 percent in 1954.

Prospective Changes in Plant Numbers and Size

The number of plants in many food processing industries probably will decrease in the next few years accompanied by an increase in average plant capacity. Changes in technology and the need to reduce costs by economies of scale will cause many firms to build large plants and to modernize and enlarge old ones. Many small plants will be closed because they are obsolete or cannot compete successfully with newer ones.

Increases in average plant capacity and fuller utilization of capacity that accompanied past reductions in plant numbers probably aided in holding down costs. The closing of a plant may affect the degree of competition in the market for a product. Though the number of plants in most of the food industries is large compared with many other industries, the number in some local areas may not be adequate to insure a high degree of competition. Much more information than is now available would be needed to evaluate the effect on competition of changes in the number of plants.

Fewer Companies in Many Industries

The number of companies declined from 1947 to 1958 in 16 of the 21 food processing industries for which data are available (table 8). Decreases ranged from 6 percent in the macaroni and spaghetti and cane sugar refining industries to 58 percent in the cereal preparations industry. The number of plants declined in all but 1 of these 16 industries. In 11, plants decreased by a larger number than companies.

In 4 of the 21 industries, the number of companies increased. Increases ranged from 8 percent for the dehydrated fruits and vegetables industry to 232 percent for the poultry dressing industry.

In one industry -- special dairy products -- the number of companies was the same in 1958 as in 1947. Data for this industry, however, are not strictly comparable.

Comparable data for 1958 and 1954 are available for 4 other industries for which 1947 data are lacking. The number of companies and plants declined in the fluid milk and canned fruits and vegetables industries, and increased in the prepared meats and frozen fruits and vegetables industries.

Some companies operated plants in more than one of these industries. For that reason, the total number of companies in the food processing industries cannot be obtained by adding individual industry totals.

Wholesale Trade in Farm and Food Products

Assemblers of Farm Products

Assemblers buy or receive farm products directly from farmers. Generally, they ship products to processors or to city wholesalers and retailers.

The total number of establishments operated by assemblers of farm food products increased about 8 percent from 1954 to 1958, after declining 15 percent from 1948 to 1954 (table 10). Assemblers of fresh fruits and vegetables and livestock had more establishments in 1958 than in 1954 and in 1948. Those handling grain operated more in 1958 than in 1954, but fewer than in 1948. But assemblers of dairy products and poultry and eggs had fewer establishments in 1958 than in 1954. The number operated by each type of assembler was smaller in 1954 than in 1948.

Growth in the volume of farm food products marketed probably was a major cause of the increase in the number of assembler establishments from 1954 to 1958. Farmers marketed increasing quantities of grain, meat animals, fruits and vegetables, poultry and eggs, and milk. Dollar sales of each group of assembly establishments, except those assembling dairy and poultry products, totaled more in 1958 than in 1954, though prices of many farm products declined during this period.

Much of the gain in the total number of assembler establishments resulted from the increase in establishments assembling grain. The need for increased storage capacity for grain held under various Federal programs accounted for much of the growth in the number of grain assembly establishments.

Changes in producing and marketing practices were major causes of the decline in the number of establishments handling dairy and poultry products. Decreased marketings of farm-separated cream brought the closing of many cream receiving stations. An increase in hauling of whole milk directly from farms to processing plants in tank trucks lessened the need for some country milk assembly plants. Increased specialization in the production of poultry has caused a decline in assembly establishments. Specialized poultry producers, who have thousands of birds, generally sell directly to a plant rather than an assembler. Marketings of poultry and eggs have decreased in many areas where there are few if any specialized producers.

Improvements in roads and motor trucks, changes in marketing practices and in producing areas, and efforts to reduce costs by economies of scale and technological improvements mainly accounted for the decrease in the number of assembler establishments from 1948 to 1954.

The Wholesale Food Trade

Dollar sales in most lines of the wholesale food trade increased substantially from 1948 to 1954 and from 1954 to 1958. (table 10). Most of these gains resulted from expansion in the volume of products handled, though they resulted in part from rising prices. The number of food wholesaling establishments increased.

Among the merchant wholesale establishments carrying a full line of groceries, those that were affiliated with groups of retail stores increased their sales 136 percent from 1948 to 1958. These wholesale establishments accounted for 62 percent of the total sales of general line merchant wholesale establishments in 1958. Sales of cash-

Table 10.--Wholesale food trade: Number of establishments, total sales, and average sales per establishment, 1958, 1954 and 1948

Product and type of business	Establishments			Total sales			Average sales per establishment		
	1958	1954	1948	1958	1954	1948	1958	1954	1948
	Number	Number	Number	Million dollars	Million dollars	Million dollars	Thousand dollars	Thousand dollars	Thousand dollars
Groceries									
Merchant wholesalers									
General line									
Affiliated groups 1/	673	767	846	5,236	3,762	2,216	7,780	4,905	2,619
Cash and carry depots	371	291	405	190	140	147	512	481	363
Other	1,209	2,262	3,014	3,003	3,452	3,436	2,484	1,526	1,140
Specialty line	8,166	6,940	5,458	5,036	4,580	2,719	617	660	498
Agents, brokers	2,790	2,678	2,401	7,076	6,907	4,518	2,536	2,579	1,882
Manufacturers' sales offices and branches	2,139	2,473	2,593	6,148	5,046	4,455	2,874	2,040	1,718
Meats, meat products									
Merchant wholesalers	4,459	4,357	3,200	3,879	2,866	1,977	870	658	618
Agents, brokers	153	97	58	606	521	571	3,961	5,371	9,845
Manufacturers' sales offices and branches	520	665	753	2,252	2,703	2,757	4,331	4,065	3,661
Dairy and poultry products									
Merchant wholesalers	5,149	4,941	4,839	3,396	2,815	2,689	660	570	556
Agents, brokers	420	214	151	975	516	368	2,321	2,411	2,437
Manufacturers' sales offices and branches	1,036	961	728	1,748	1,510	976	1,687	1,571	1,341
Assemblers of farm products	1,871	2,087	2,522	1,101	1,392	940	588	667	373
Fresh fruits and vegetables									
Merchant wholesalers	6,291	6,520	6,127	3,092	3,262	3,170	491	500	517
Agents, brokers	986	893	805	1,877	1,591	1,295	1,904	1,782	1,609
Assemblers of farm products	2,277	1,993	2,032	1,453	1,288	1,087	638	646	535
Farm Products (raw materials)									
Merchant wholesalers									
Grain merchants	1,693	975	378	5,073	3,990	3,051	2,996	4,092	8,071
Livestock distributors	635	669	207	759	888	407	1,195	1,327	1,966
Agents, brokers									
Grain	357	230	293	1,108	1,129	1,470	3,104	4,909	5,017
Livestock	2,246	2,223	1,745	8,936	7,558	7,173	3,979	3,400	4,111
Assemblers									
Grain	7,229	6,613	8,120	3,317	3,226	4,129	459	488	508
Livestock	1,311	1,090	1,221	2,123	1,771	2,059	1,619	1,625	1,686

1/ Wholesale establishments sponsoring grocery stores or owned cooperatively by groups of grocery stores.

Compiled from Wholesale Trade, 1958, 1954 and 1948 Census of Business.

and-carry establishments (food depots) in 1958 were 29 percent larger than in 1948, but they made up only a little more than 2 percent of the total for the general line merchant wholesalers. Sales of other general line merchant wholesalers of groceries were smaller in 1958 than in 1948 and accounted for 36 percent of the total sales. Total sales increased relatively more for specialty line than for general line grocery wholesalers (as a group) from 1948 to 1958. Establishments of specialty line wholesalers increased in number from 1948 to 1958, but the total number of establishments operated by each of the three types of general line merchant wholesalers declined. Dollar sales of groceries made by merchandise agents and brokers increased by a smaller percentage than those of specialty line grocery wholesalers. The number of establishments operated by brokers and merchandise agents handling groceries increased.

Sales of groceries, meats, dairy and poultry products by manufacturers' sales branches and offices total 24 percent more in 1958 than in 1948, but the number of establishments declined 9 percent. The relatively small gain in sales and the decrease in establishments resulted from (1) increased distribution in large lots directly from manufacturing plants to retailers' warehouses or stores, and (2) more extensive use by food manufacturers of public warehouses and the services of food brokers.

Merchant wholesalers who specialized in selling fresh fruits and vegetables had about the same volume of sales in 1958 as in 1948. The failure to grow probably resulted in part from increased buying by chainstores from country assemblers and farmers rather than through wholesalers. It also resulted partly from greater use of brokers. The number of brokers' establishments specializing in fruits and vegetables increased and their sales went up 45 percent from 1948 to 1958. The total volume of fruits and vegetables sold in fresh form increased little, if any, during this period.

The Retail Food Trade

Grocery Store Numbers and Sales

There were one-fourth fewer grocery stores in the United States in 1958 than there were in 1948 (table 11). The average rate of decline was less in the 1954-58 period than it was in 1948-54; an annual average drop in store numbers of 2.5 percent in 1954-58 compares with 3.6 percent in the earlier period.

Most of the 10-year decrease was in stores operated by single-unit firms, but the rate of decline was just as great for the chains operating more than 100 stores. 16/ Firms operating 4-10 stores reduced total store numbers only 7 percent (table 11). The only category to show an increase in number of stores consisted of firms with 51 to 100 stores; a rapid rise after 1954 overcame a sharp decline from 1948 to 1954, resulting in a net increase of 3 percent in 10 years. The group includes many rapidly growing regional chains that have built sales both by opening new stores and merging with other firms.

Average sales per grocery store more than doubled between 1948 and 1958, even after allowing for the rise in food prices. (See cover chart.) Each size-of-firm category had more than twice the average dollar sales per grocery store in 1958 that it had in 1948 (table 11). The group that exhibited the largest advance was the 51-100 store group. It more than quadrupled its average sales size and advanced to the top of the list in sales per store.

16/ The 32 percent decline in number of single-unit stores is reduced to about 27 percent when allowance is made for the change in definition of establishment between 1948 and 1958 (see footnote 2 to table 11). This compares with a 26 percent decline in stores operated by chains with 100 stores or more.

Table 11.--Retail food stores: Number, total sales, and sales per store by kind and number of units, 1958, 1954, and 1948

Kind of store and number of units	Store			Sales			Sales per store 1/		
	1958	1954	1948	1958	1954	1948	1958	1954	1948
	Number	Number	Number	Mil. dol.	Mil. dol.	Mil. dol.	Thou. dol.	Thou. dol.	Thou. dol.
Grocery stores: 2/									
Single units	234,901	254,805	347,063	20,557	17,838	14,552	88	70	42
2 or 3 units	4,960	5,559	5,829	2,084	1,664	899	420	299	154
4 - 10 units	2,312	2,171	2,497	1,843	1,366	787	797	629	315
11 - 50 units	3,198	3,460	3,559	3,358	2,598	1,371	1,050	751	385
51 - 100 units	1,566	1,141	1,525	1,750	818	372	1,118	717	244
101 or more units	12,859	12,304	17,466	14,105	10,136	6,788	1,097	824	389
Total	259,796	287,572	358,671	43,696	34,901	25,038	168	121	70
Other food stores	95,712	97,044	102,242	5,326	4,861	4,170	56	50	41
Total	355,508	384,616	460,913	49,022	39,762	29,208	138	103	63

1/ Computed from sales in thousands of dollars.

2/ Totals for the 3 census years are comparable, but data for single and multi-units are not strictly comparable. Delicatessen stores are included in all data for 1958 but only in the totals for 1954 and 1948. Further, the 1958 and 1954 censuses excluded establishments that had no paid employees and sales of less than $2,500 a year but the census for 1948 included all establishments that had a sales volume of $500 or more provided they operated the entire year. The totals for 1948 are based on the 1958 and 1954 definition of establishment but the detailed data are not. Because of these differences in coverage some of the data for single and multi-units do not add to totals. Delicatessen stores numbered 8,132 in 1954 and 7,917 in 1948.

Compiled from Retail Trade, Census of Business, 1958, 1954, and 1948.

Total sales of grocery stores increased by three-fourths (table 11), while retail food prices rose by one-seventh. Sales of stores in all chain-size groups totaled more in 1958 than in 1948, but a large disparity existed in the rate of advance. Total sales of stores belonging to chains operating 51-100 stores increased nearly four times, but stores of single-unit firms failed to double total sales. The 51-100 store category combined the most rapid increase in sales per store with a rise in numbers of stores.

The unequal rise in sales resulted in a shift in market shares from single to multi-unit firms. Sales of single-unit firms were reduced to 47 percent of total grocery store sales from 59 percent in 1948. Firms operating between 2 and 100 stores obtained 21 percent in 1958, up sharply from 14 percent in 1948. Grocery firms with more than 100 stores increased their share to 32 percent of the total market in 1958 from 27 percent in 1948. The percentage of total grocery store sales made by chains with 11 stores or more was 44 percent in 1958, up from 39 percent in 1954 and 34 percent in 1948. This growth followed a period of relative stability. Chains with 11 or more stores accounted for an estimated 33 percent of total grocery store sales in 1939.

Trade sources show an 11 percent increase between 1958 and 1961 in number of grocery stores operated by firms with 2 or more stores. 17/ Chains in each size group participated in the rise to about the same degree. Total sales of grocery stores rose by 8 percent between 1958 and 1960 18/ Sales of grocery stores belonging to firms operating 11 stores or more increased by 11 percent, so the market share obtained by this size of chain increased further.

Total civilian population of the United States rose by 18 percent and per capita disposable income rose by 41 percent between 1948 and 1958. These factors plus a 16 percent rise in food prices (including restaurant prices) largely account for a 40 percent increase in total expenditures on food. 19/ The much larger rise in grocery store sales (75 percent) was partly explained by a slower rate of increase in sales of other food stores and the increase in nonfood sales made by grocery stores. In 1959, nonfood sales accounted for about 15 percent of grocery store sales and alcoholic beverages amounted to another 5 percent. 20/

The rise in average sales per store is attributed, in part, to the closing of small stores. In addition, new stores are larger. A sample of new stores opened in 1960 had an average of 21,300 square feet compared with 13,500 square feet for a sample in 1953. 21/ The number of items carried by typical grocery stores rose to 5,000 in 1958 from 3,000 in 1946 according to another trade source. 22/

Specialized Food Stores

Food stores other than grocery stores (and delicatessens) include meat and fish (seafood) markets, fruit stores, vegetable markets, candy, nut and confectionery stores, dairy product stores, retail bakeries, and miscellaneous food stores. Their number amounted to about one-fourth of the total number of stores classified as retail food stores in the 1958 Census of Business (table 11). The

17/ Directory of Supermarket and Grocery Chains (New York: Business Guides, Inc., 1958 and 1961 editions).

18/ U. S. Bureau of the Census, Annual Retail Trade Reports, 1958, 1959, and 1960.

19/ U. S. Department of Commerce, Office of Business Economics, U. S. Income and Output, Nov. 1958 and Survey of Current Business, July, 1961.

20/ "What Customers Spend for all Products Sold in Food Stores" Food Field Reporter, Aug. 29, 1960.

21/ Supermarket Institute, Facts About New Supermarkets, Chicago, 1953 and 1961.

22/ Progressive Grocer, Facts in Grocery Distribution, New York, 1959.

number of these stores declined relatively less (6 percent) between 1948 and 1958 than did the number of grocery stores; however, their sales did not increase nearly as much (28 percent). Much of this rise is accounted for by the accompanying increase in food prices. Total sales of specialty food stores did not increase between 1958 and 1960.

These specialized food stores are mostly small, independently operated stores. Their average sales size was smaller than that of the average single-unit grocery store in 1958 (table 11). In 1948, the two were about the same size. This pattern of slow growth contrasts sharply with the rise in total expenditures on food and the even more rapid rise in sales of grocery stores. Obviously, these specialized food stores are not maintaining their share of the total food market. Their market has been encroached upon by grocery stores, that have expanded the number of items they carry. Large scale supermarkets handle many of these items for a lower margin than the small specialized stores.

Size Groups of Grocery Stores

All of the decline in total number of stores between 1948 and 1958 was concentrated in the sales-size group grossing less than $100,000 annually (table 12). Stores in all larger sales-size groups increased, with the greatest gain in the group selling in excess of $1,000,000. The one-seventh rise in food prices between 1948 and 1958 moved some stores into larger size groups with no increase in physical volume, but this effect of inflation is overshadowed by the big increase in number of large size stores. In 1958, 46 percent of all grocery store sales were made by stores selling more than $1,000,000 each. This figure corresponds with 33 percent in 1954 and only 12 percent in 1948. Of the stores grossing more than $1,000,000 in 1958, a fourth had sales of more than $2,000,000.

Up to a point, average sales per store rose in conjunction with an increase in number of stores operated per firm (table 11). Stores operated by single-unit firms had less than one-tenth the average sales of stores belonging to chains with 11 stores or more. But in each of the 3 census years stores of firms operating 11-50 units had substantially the same average sales size as did the two larger categories of chains. This leveling out of store sales size at a rather small size of chain suggests that most with-in store scale economies are probably realized by this common size of store, that is, somewhat in excess of $1,000,000 in 1958. Chain stores have the option of expanding firm size by either increasing store sizes or opening more stores. Thus, the choice of a given size by various groups of chains is suggestive of efficient store size. The rise in average size from 1948 to 1958 indicates that the efficient size has been getting rapidly larger over time. 23/

Form of Organization of Grocery Firms

Corporations operated only 10 percent of all grocery stores in the United States, though they accounted for 58 percent of total sales in 1958 (table 13). Individual proprietorships operated 77 percent of the stores but only accounted for 29 percent of the sales. Partnerships made up 12 percent of both number of stores and sales, leaving less than 1 percent of each to cooperatives and other forms of organization.

Nine-tenths of the grocery stores exceeding $1,000,000 in sales in 1958 were owned by corporations, but nine-tenths of those with a volume of less than $100,000 were owned by individual proprietors (table 13). More than one-third of the corporately owned grocery stores exceeded $1,000,000 in sales. More than four-fifths of the stores owned by individual proprietors grossed less than $100,000 in 1958, compared with 9 percent

23/ For the development of this concept of scale economies, see G. J. Stigler, "The Economies of Scale", The Journal of Law and Economics (1958), I:54-71.

Table 12.--Grocery stores: Number and total sales, by sales-size of stores, 1958, 1954 and 1948 1/

Annual sales per store	Stores			
	1958	1954	1948	Percentage change, 1948 - 1958
Thousand dollars	Number	Number	Number	Percent
Less than 100	175,581	204,880	276,511	- 37
100 - 299	39,422	40,398	36,222	9
300 - 499	8,369	7,711	6,197	35
500 - 999	9,092	7,507	5,360	70
1,000 or more	10,332	6,242	1,911	441
Total 2/	242,796	266,738	326,201	- 26
	Sales			
	Million dollars	Million dollars	Million dollars	Percent
Less than 100	6,290	7,381	8,564	- 27
100 - 299	6,463	6,523	5,774	12
300 - 499	3,227	2,978	2,391	35
500 - 999	6,445	5,294	3,680	75
1,000 or more	18,757	10,723	2,757	580
Total 2/	41,183	32,899	23,167	78

1/ Data are not strictly comparable because only 1958 includes delicatessens and the 1948 definition of establishment includes more small stores than does 1958 or 1954 definition (see footnote 2 to table 11).
2/ Includes only stores operated entire year.

Compiled from Retail Trade, Census of Business, 1958, 1954 and 1948.

of the stores owned by corporations. A relationship thus exists between sales-size of store and legal form of organization.

Corporations did not all operate chain stores in 1958; of the 35,983 corporately owned food stores, 10,659 were single units. Similarly, most but not all individual proprietorships operated single units. In 1958, 102 food stores owned by individual proprietors were in chains of 11 stores or more.

Most individual proprietors own small stores. Since the number of small stores declined sharply, the number of grocery stores operated by individual proprietors decline 32 percent between 1948 and 1958. During the same period, the number of stores operated by corporations declined by only 6 percent. One out of 10 grocery stores was corporately owned in 1958, compared with 1 out of 13 in 1948.

Table 13.--Grocery stores: Number and total sales, by legal form of organization and sales-size group, 1958 1/

Annual sales per store	Individual proprietorships	Partnerships	Cooperatives and others	Corporations
	Stores			
Thousand dollars	Number	Number	Number	Number
Less than 100	158,466	14,565	217	2,333
100 - 299	24,229	10,391	162	4,640
300 - 499	3,169	2,196	43	2,961
500 - 999	1,560	1,375	30	6,127
1,000 or more	391	531	33	9,377
Total 2/	187,815	29,058	485	25,438
	Sales			
	Million dollars	Million dollars	Million dollars	Million dollars
Less than 100	5,401	742	11	137
100 - 299	3,823	1,746	29	866
300 - 499	1,197	834	16	1,180
500 - 999	1,031	925	20	4,469
1,000 or more	579	868	61	17,250
Total 2/	12,030	5,114	137	23,902

1/ Includes delicatessens.
2/ Stores operated entire year.

Compiled from Retail Trade, Census of Business, 1958.

Table 14.--Sources of 1958 sales of 154 food chains, by size of chain

Number of stores in chain, end of 1958	Number of chains	Percentage distribution of 1958 sales among: Stores in operation in 1953	New stores opened since 1953	Stores acquired since 1953	All stores
	Number	Percent	Percent	Percent	Percent
11 - 50	117	62	31	7	100
51 - 100	18	57	29	14	100
101 - 500	13	53	32	15	100
500 and over	6	82	15	3	100
Total	154	71	22	7	100

Compiled from FTC Economic Inquiry into Food Marketing, Part I, 1960, p. 105.

Acquisition of Stores

One hundred and fifty-four food chains reported to the Federal Trade Commission that 71 percent of their total 1958 sales were made by stores owned by them since 1953 (table 14). Another 22 percent were made by new stores opened since 1953, and the remaining 7 percent were made by stores acquired by merger or purchase during 1953-58. This distribution of sales emphasizes the magnitude of new store construction during recent years. No data are available showing the volume of sales of the stores closed or replaced by new stores. The largest chains had the highest percentage of 1958 sales from stores operated since 1953, and the smallest percentage of sales from newly opened and acquired stores. Merger activity was the strongest, in terms of acquired sales, by the two size groups having 51-100 and 101-500 stores.

Merger activity by food chains was unusually strong during 1955-58. The FTC reported 1,678 food stores with total annual sales of $1.6 billion were acquired during the 4 years. 24/ These acquisitions represented three-fourths of all those reported for the entire 1949-58 period. The bulk of the mergers were centered in relatively few firms. Between 1949 and 1958 more than one-third of the merged stores were acquired by two firms and two-thirds were acquired by 10 firms. Of the 1,474 stores acquired by these 10 firms, 279 had been sold or closed and not replaced by 1958, 255 had been replaced, and 940 were still being operated. The large proportion of replacements suggests that acquisitions of smaller firms was often used as a method of gaining entry into local markets and specific locations.

Wholesaler Affiliated Grocery Stores

Wholesale firms affiliated with grocery firms include (1) those that sponsor grocery stores under voluntary contractual agreements to purchase regularly certain supply requirements and (2) wholesale firms cooperatively owned by patron stores. Their primary purpose is to buy merchandise centrally, so their members may obtain procurement economies equivalent to those obtainable by chain stores. Some groups provide certain other services such as joint advertising and managements aids on a service fee basis.

Retailer affiliated wholesalers increased their sales more rapidly than did any other group of merchant wholesalers (table 10). They even outpaced retail sales gains made by all grocery stores between 1948 and 1958 (tables 10 and 11). Affiliated wholesalers departed sharply from the pattern exhibited by the other general line wholesalers.

The FTC's study of food retailing revealed that 26 percent of all grocery stores in the United States either were members of a cooperatively-owned wholesale firm or were sponsored by a wholesaler (table 11 and 15). Cooperatively-owned wholesalers sold to only a few nonmembers, but sponsors of voluntary groups sold to more nonmembers than members. These nonmembers were very small accounts but they made up two-fifths of the sponsor's total sales in 1958. The bulk of the affiliated membership consisted of small firms. Only 36 chains having 11 or more stores were affiliated with a wholesaler. 25/ These chains operated a total of 991 stores.

24/ Federal Trade Commission, Economic Inquiry into Food Marketing, Part I, 1960, p. 128.

25/ FTC, Economic Inquiry into Food Marketing, Part I, pp. 165-66 and 209.

Table 15.--Affiliated wholesalers and member grocery stores: Number and sales, 1958 1/

Type of wholesaler	Affiliated wholesalers in 1958 operating in: 1958	1954	1948	Member stores 1958
	Number	Number	Number	Number
Voluntary sponsor....	329	227	150	35,822
Cooperatively owned..	143	141	131	33,007
Total.....	472	368	281	68,829
	Total sales			Retail sales of member stores in 1958 2/
	1958	1954	1948	
	Million dollars	Million dollars	Million dollars	Million dollars
Voluntary sponsor....	3,560	2,065	763	9,000
Cooperatively owned..	2,031	1,209	544	7,884
Total.....	5,591	3,274	1,307	16,884

1/ Sample consists of 70 percent of the affiliated wholesalers reporting to Census in 1958 and 33 percent reporting in 1948; sales varied from 107 percent of those reported to the Census in 1958 to 59 percent in 1948.
2/ Estimated by FTC on basis of reports from wholesale groups.

FTC Economic Inquiry into Food Marketing, Part I, 1960, pp. 159-235.

Stores affiliated with wholesalers accounted for 39 percent of total sales of grocery stores in 1958, as estimated by the FTC (tables 11 and 15). This percentage added to the 44 percent of sales made by all chains with 11 stores or more, and eliminating duplication, leaves about one-fifth of total sales by grocery firms with fewer than 11 stores and not affiliated with a wholesale firm. Progressive Grocer estimated that affiliated stores made 45 percent of total grocery store sales in 1958 but only 30 percent in 1948. 26/ It has been pointed out that chain sales rose from 34 to 44 percent during the same 10 years. These trends point to a rapid decline in the market share of independent stores not affiliated with a wholesaler.

The large share of retail sales made by wholesaler affiliated stores, however, is not accompanied by an equivalent degree of concentration in procurement. Affiliated stores obtain only about one-third of their supply requirements through their respective affiliated wholesalers. These supplies consist largely of grocery products. The bulk of their other requirements are bought from other types of wholesalers or purchased directly from processors.

26/ General stores are included in Progressive Grocer estimates, accounting for part of the discrepancy with the FTC data, see Progressive Grocer (April, 1959, p. F-18).

Most affiliated stores are quite small. Purchases from wholesalers by member or sponsored stores averaged approximately $60,000 in 1958. Fewer than 5 percent of these stores had retail sales exceeding $1,000,000 in 1958. 27/ Nearly 85 percent had annual sales of less than $375,000. For this reason, economies obtained by members through group buying are partly offset by high costs of distribution to small accounts. Nevertheless, the rapid expansion of this form of organization confirms its ability to meet competition.

Future Prospects in Food Retailing

The affiliation of retail grocery stores with wholesalers, either by cooperative ownership or by being sponsored by a wholesaler, represents the efforts of independent grocers to compete with chain stores. Economies of large volume purchasing are thereby obtained and passed on to member or sponsored stores in the form of reduced merchandise costs. Large-volume independent stores thus have been able to compete effectively.

Independent grocers, though buying through affiliated wholesalers, may face a declining share of the market if they are not large enough to realize low unit costs in merchandising and selling. In addition, high distribution costs of servicing small accounts may be passed on to small affiliated stores. Furthermore, small stores may have increasing difficulty in satisfying group membership requirements. Many of the nonaffiliated independents, which are declining rapidly in number, have even higher purchasing costs. High costs per unit resulting from small size will continue to place this group of retail grocers at a competitive disadvantage with larger stores, both independents and chains.

Local and regional chains are likely to continue to increase their share of the total grocery store business. This rise will probably come at the expense of both larger and smaller firms. Many examples exist of their past growth at the expense of national chains. The corporate form of organization likely will gain in popularity as small chains grow in number and size. Some of them have found affiliation with wholesalers their best method of obtaining supplies.

The rise in share of market taken by chains and wholesaler affiliated independents may reduce the number and increase the average size of organizations purchasing food products. However, the reverse may also occur. Two-thirds of supply requirements of affiliated stores are obtained either directly or from independent wholesalers. Thus, affiliated wholesalers may represent new competitors at the supplier or wholesale levels of the market. Likewise, a growing chain shifting to direct purchasing may inject new competition in the supplier market.

Total sales (in constant dollars) of specialty line wholesalers in recent years have increased nearly as much as have total sales of food stores. Sales gains of specialty line grocery and meat product wholesalers have exceeded those of grocery stores. Some of the other specialty wholesalers have not had parallel growth and the nonaffiliated full line wholesalers have lost a big piece of their former market. Such trends suggest that retailers are continuing to utilize the services of certain classes of wholesalers while bypassing others. Specialization in wholesaling can be expected to continue alongside the trend toward affiliation of independent grocery stores with wholesalers.

27/ FTC, Economic Inquiry into Food Marketing, Part I, p. 207.

FOOD RETAILING BY DISCOUNT HOUSES 1/

A new development in food retailing seems to be under way: Food is being sold by discount houses. The number of these houses is increasing rapidly with the volume of food sold through their food departments growing at an even more rapid pace. Although few trading areas have been penetrated and relatively few discount houses have food departments, trade estimates place food sales by discount houses at an annual rate of $2 billion (about 4 percent of total retail food sales), a figure that some believe may quadruple in the next 4 years. Food retailers and wholesalers devoted a major part of their convention programs in 1961, to discussions of discount operations--their own or their competitors.

Many of the major supermarket chains are entering the discount field by acquiring groups of discount outlets. Some are obtaining food concessions in existing general merchandise discount houses; others have obtained a limited number of concessions on a pilot basis to determine whether they will enter this field on a wider basis.

Originally, the discount house was a small, one-man enterprise, operating in low rent quarters, carrying no inventory, with the "I can get it wholesale" appeal. Today, most discount houses are modern, attractive, departmentalized, retail establishments, but still operating with the appeal of lower prices. Many of the large, well known retail organizations are now entering this field.

The operations of discount houses vary. Some are closed-door businesses in which participants are eligible for membership either by payment of a nominal fee, or by status in a group such as government employees, veterans, union members, etc., or both. Others are open to all. Some discount houses handle limited lines of merchandise such as clothing or electrical appliances; others carry a wide assortment of lines comparable to those of suburban branches of department stores. Many of the larger discount houses include substantial supermarket operations. Some discount houses operate their food departments as a concession, others as a component part of the discount house.

At present ownership of a discount house, method of operation, and form of organization are diverse. Some discount houses are individual units, operated as single proprietorships, partnerships or corporations. Others are operated by chain-like organizations, which build discount centers, sell the concessions, and operate as a management group performing functions such as advertising, personnel management, public relations, accounting, protection, and property management. Some are multi-unit discount organizations owned by food supermarket chains, and, more recently, by some of the major variety and department store chains, that use a different name for the discount houses.

1/ Prepared by Martin Leiman and Martin Kriesberg, marketing specialists, Marketing Economics Division, Economic Research Service. This article is based on a preliminary study of the impact of retail food operations by discount houses, which included a review of literature in the field of discounting; interviews with wholesalers, supermarket operators, retailers, discount house operators; and observations in representative types of discount house retail food operations.

Size and Nature of Discount House Food Operations

Food departments in some discount houses carry a greater variety and assortment of food items than conventional supermarkets. Some, however, limit themselves largely to items with rapid turnover. Many discount-house food departments do two or three times the dollar volume of conventional supermarkets. However, unlike conventional supermarkets, discount food departments do not as a rule carry such nonfood items as soft goods, hardware, or household goods, and health and beauty aids, since these items are stocked in other departments. When discount food sales are considered on a departmental basis, i.e. grocery, produce, and meat, a higher percentage of business is done in the perishable departments than in conventional supermarkets. This is due in part to the absence of nonfood items in the total sales figure used in computing the percentage of grocery sales of the discount house, whereas these items are considered to be groceries in conventional supermarkets. In addition, the pricing policies of discounters may encourage greater purchases of perishables--fresh fruits and vegetables and meats--that generally have a more elastic demand with respect to price at retail than do non-perishables. Although soft goods and other nonfood merchandise are not included in discount center food departments, annual sales for food departments often exceed $2.5 million. Furthermore, in many discount centers the food department accounts for 25 percent of the total dollar sales volume.

Some conventional supermarket chains have gone into discount operations by enlarging their nonfood departments in selected new stores; in these instances, the food department occupies about 50 percent of the store sales area, and food sales are more than two-thirds of the total dollar volume. Thus, sales per square foot of floor space are higher for the food department. It can be concluded that the greater sales volume of food items relative to space occupied, results from a faster rate of turnover, since unit value is generally greater for nonfoods than for food items.

Little information is available on how efficiently food departments of discount houses are operated. Inspection of discount house supermarkets reveals wide differences in handling methods and facilities, work organization and scheduling, inventory control and space management, etc., that may in part reflect the operating experience of the owners. Operating ratios such as sales per manhour and labor costs as a percentage of sales are not now available. Nor is there good information on prices and margins for items sold in discount houses to compare with information of this type for the same or like items sold in conventional supermarkets.

Many operators of food departments in discount centers have used mass display and marked price reductions to create the same image and consumer enthusiasm that accompanied the introduction of the supermarket. Retailers who operate both conventional and discount house supermarkets indicate that mass displays in discount centers account for greater unit sales than similar displays in conventional supermarkets. They also indicate that though the shopper may have been drawn to the discount house by its bargain image; once she starts her trip through the discount house supermarket's aisles she is not aware of, or concerned with prices for individual items.

Loss leader merchandising is part of the discount house food operation, but there is no evidence to indicate that these departments as a whole are being operated at a loss to generate traffic and sales for the nonfood departments. Moreover, if food sales represent a substantial portion of total discount house sales, it would be impossible to operate the food department at a loss in the long run. Such a loss could not be recouped from sales of nonfood items sold at discount prices. Furthermore, consumer awareness of nonfood prices, especially for appliances, of other discounters and low margin distributors, lessens the possibility of higher margins.

Several factors combine to indicate that the discount house supermarket could have lower operating costs than conventional supermarkets. First, the use of less pretentious interior decor and the trimming of such services as "Kiddie Korners" and the special service meat window, tend to lower costs. Second, consumer purchases in discount houses tend to be larger; hence costs associated with each customer transaction are a smaller proportion of sales. Third, the use of cut-case or tray-pack methods of shelf stocking, which appear to be more acceptable to discounters than to conventional supermarket operators, could help lower discount house supermarket labor costs. Fourth, the retail cost for the discount house supermarket may be less than similar costs for conventional supermarkets because of sharing certain costs with other occupants of the building that are associated with economies of scale. Fifth, many slow moving and high mark-up nonfood items are not handled; thus, overhead costs incurred by stocking these items are avoided. In addition, advertising costs for closed-door discount houses may be less than comparable costs for conventional supermarkets. Advertising by closed-door discount houses is usually in the form of bulletins mailed once or twice per month, with the costs shared by the various departments of the center. In contrast, most conventional supermarkets advertise one or more times per week in newspapers and/or radio, television, and other forms of paid media. This apparent cost advantage does not usually apply to food departments in open-door discount centers. Most of these firms follow the same advertising procedures as conventional supermarkets.

Impact on Traditional Marketing Patterns

Food trade publications, advertising, and other business papers have published numerous articles on discounting. Most of these articles have discussed firms that were entering the field and the manner of their entry. Little has been published on the economics of discount firm operation or the economic impact of food retailing in this form. The tenor of remarks by various trade spokesmen is that discount houses are here to stay, that they are a means of mass low cost distribution, and that they will show phenomenal growth. Many also contend that discount houses are filling the gap left by supermarkets as they moved from low cost distribution to higher cost, nonprice competitive practices. These business analysts say that discount houses will go through a similar cycle of increasing costs, and hence will in turn be vulnerable to a new type of low cost operation.

On the other hand, there are operators of conventional supermarkets who, despite acquiring substantial discount operations, still have reservations about discounting. They question (1) the long-run consumer reaction to discounting; (2) the profit potentials of retail food discount operations; and (3) whether the leased departments arrangement, typical of many discount houses, is a weakness that might contribute to the failure of enterprises of this nature. Similarly, a leading grocery wholesaler, selling to conventional supermarkets, smaller food outlets, and discounters, stated that he did not believe that discounters in his trading area can offer price reductions sizable enough to capture a large percentage of the business in the long run. Contrary to this view was the alarm expressed by a progressive voluntary-group wholesaler, whose affiliated stores are faced with considerable discount house competition, over their ability to meet discount house price competition and still operate at a profit.

If the discount houses achieve the food sales volume projected by some trade sources -- $8 billion in 1966 -- they will have an important influence on traditional patterns of food distribution. At

this stage of our knowledge of the discount house field, and consumer attitudes, images and reactions, these developments appear likely: (1) Discount houses generally will attract consumers who are willing to sacrifice services for low prices. This will have varying effects on conventional food outlets within trading areas, depending on the images they have created in their customers. (2) Competition in the retail food field will grow as some of the large variety and department store chains establish discount units with full-scale supermarket operations. (3) As price competition between discounters and conventional supermarkets intensifies, both will be forced to operate either more efficiently or to exert price pressure back to the growers and processors. (4) As supermarket firms appraise the implications of discount houses and experiment with different forms of discount operation, there will be a slowdown in the construction of new conventional supermarkets. (5) Discount houses will move into low population density trading areas, where retail development has been slight, inasmuch as they attract people from a much larger trading area than do conventional retail outlets. This will affect small wholesalers and retailers in nonurban areas who have been relatively free from this kind of competition.

Growth Through Agricultural Progress

SELECTED NEW PUBLICATIONS

1. "A Decade of Change in the Dairy Industry 1950-60," U.S. Dept. Agr., ERS-44, Nov. 1961.
2. "Analysis of Hedging and Other Operations in Wool and Wool Top Futures," by L. D. Howell, U.S. Dept. Agr., Econ. Res. Serv., Tech. Bul. 1260, Jan. 1962.
3. "Changing Grain Market Channels," by Walter G. Heid, Jr., U.S. Dept. Agr., ERS-39, Nov. 1961.
4. "Market Potential for Processed Potato Products," by Harry H. Harp and Denis F. Dunham, U.S. Dept. Agr., Mktg. Res. Rpt. 505, Oct. 1961.
5. "Returns from Marketing Cottonseed and Soybean Oils in Margarine," by Virginia M. Farnworth, U.S. Dept. Agr., Mktg. Res. Rpt. 503, Oct. 1961.
6. "Seed Cotton and Multiple Lint Cleanings at Gins -- Effect on Grade, Price, and Bale Value, A Progress Report," by Zolon M. Looney and Edsel A. Harrell, U.S. Dept. Agr., ERS-43, Dec. 1961.
7. "Special Study Group on Cigar Tobacco -- A Report of a Study Group of the U.S. Department of Agriculture," ERS-40, Nov. 1961.
8. "The Changing Feed Mixing Industry -- Practices in Selected States," by Carl J. Vosloh, Jr., and V. John Brensike, U.S. Dept. Agr., Mktg. Res. Rpt. 506, Oct. 1961.
9. "The Marketing of Cottage Cheese and Frozen Dairy Products in Kansas, Missouri, and Oklahoma," by W. Webster Jones, U.S. Dept. Agr., Mktg. Res. Rpt. 504, Oct. 1961.

Publications issued by State Agricultural Experiment Stations may be obtained from the issuing Station.

LIST OF SPECIAL ARTICLES
in
The Marketing and Transportation Situation
1961

Marketing Costs, Margins, and Profits

Transportation

Miscellaneous

Table 16.- Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, October-December 1961 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket 3/			1,048.89	---	---	398.38	650.51	38
Meat products			276.73	---	---	141.25	135.48	51
Dairy products			202.98	---	---	90.41	112.57	45
Poultry and eggs		Average quantities purchased	85.47	---	---	51.51	33.96	60
Bakery and cereal products	Farm produce equivalent	per urban						
All ingredients	to products bought	wage-earner	168.26	---	---	30.31	137.95	18
Grain	by urban families	and	---	25.77	3.05	22.72	---	14
All fruits and vegetables		clerical-	226.86	---	---	65.14	161.72	29
Fresh fruits and vegetables		worker	129.55	---	---	42.83	86.72	33
Fresh vegetables		family	63.96	---	---	18.41	45.55	29
Processed fruits and vegetables		in 1952	97.32	---	---	22.30	75.02	23
Fats and oils			43.76	---	---	12.64	31.12	29
Miscellaneous products			44.83	---	---	7.13	37.70	16
			Cents	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.16 lb. Choice grade cattle	Pound	78.9	49.9	4.5	45.4	33.5	58
Lamb (Choice grade)	2.38 lb. lamb	Pound	66.1	36.5	6.2	30.3	35.8	46
Pork (retail cuts)	2.13 lb. hogs	Pound	58.9	35.0	4.3	30.7	28.2	52
Butter	Cream and whole milk	Pound	76.3	---	---	53.8	22.5	71
Cheese, American process	Milk for American cheese	1/2 pound	36.3	---	---	15.1	21.2	42
Ice cream	Cream and milk	1/2 gallon	86.2	---	---	4/23.3	62.9	27
Milk, evaporated	Milk for evaporating	14-1/2 ounce can	15.8	---	---	6.4	9.4	41
Milk, fluid	Wholesale fluid milk	Quart	25.7	---	---	11.1	14.6	43
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	36.1	---	---	17.9	18.2	50
Eggs	1.03 doz.	Dozen	55.8	---	---	37.1	18.7	66
Bread, white								
All ingredients	Wheat and other ingredients	Pound	21.0	---	---	3.0	18.0	14
Wheat	.882 lb. wheat	Pound	---	2.7	.3	2.4	---	11
Crackers, soda	1.38 lb. wheat	Pound	30.2	4.3	.5	3.8	26.4	13
Corn flakes	1.57 lb. white corn	12 ounces	26.8	3.7	1.0	2.7	24.1	10
Corn meal	1.34 lb. white corn	Pound	13.4	3.1	.3	2.8	10.6	21
Flour, white	6.9 lb. wheat	5 pounds	55.7	21.6	2.5	19.1	36.6	34
Rolled oats	2.31 lb. oats	18 ounces	22.5	4.6	.7	3.9	18.6	17
Apples	1.08 lb. apples	Pound	13.3	---	---	5.1	8.2	38
Grapefruit	1.04 grapefruit	Each	14.0	---	---	2.1	11.9	15
Lemons	1.04 lb. lemons	Pound	19.3	---	---	4.2	15.1	22
Oranges	1.04 doz. oranges	Dozen	77.7	---	---	23.1	54.6	30
Beans, green	1.09 lb. snap beans	Pound	22.7	---	---	8.4	14.3	37
Cabbage	1.10 lb. cabbage	Pound	8.0	---	---	1.9	6.1	24
Carrots	1.06 lb. carrots	Pound	14.8	---	---	3.5	11.3	24
Celery	1.11 lb. celery	Pound	13.8	---	---	4.0	9.8	29
Lettuce	1.41 lb. lettuce	Head	17.4	---	---	5.4	12.0	31
Onions	1.06 lb. onions	Pound	10.0	---	---	3.5	6.5	35
Potatoes	10.42 lb. potatoes	10 pounds	56.0	---	---	12.8	43.2	23
Sweetpotatoes	1.12 lb. sweetpotatoes	Pound	14.4	---	---	4.8	9.6	33
Tomatoes	1.18 lb. tomatoes	Pound	26.7	---	---	9.0	17.7	34
Orange juice, canned	5.88 lb. Fla. oranges for canning	46 ounce can	48.7	---	---	17.8	30.9	37
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	32.5	---	---	6.4	26.1	20
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	14.8	---	---	2.1	12.7	14
Corn, canned	2.49 lb. sweet corn	No. 303 can	20.5	---	---	2.3	18.2	11
Peas, canned	.69 lb. peas for canning	No. 303 can	22.2	---	---	2.9	19.3	13
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	15.9	---	---	2.7	13.2	17
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	24.2	---	---	11.8	12.4	49
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	27.1	---	---	6.0	21.1	22
Beans, green, frozen	.71 lb. beans for processing	9 ounces	22.6	---	---	4.2	18.4	19
Peas, frozen	.70 lb. peas for freezing	10 ounces	20.5	---	---	3.1	17.4	15
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	17.2	---	---	6.0	11.2	35
Dried prunes	.97 lb. dried prunes	Pound	41.8	---	---	17.3	24.5	41
Margarine, colored	Soybeans, cottonseed, and milk	Pound	28.9	---	---	8.4	20.5	29
Peanut butter	1.77 lb. peanuts	Pound	56.0	---	---	19.7	36.3	35
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	38.3	---	---	7.2	31.1	19
Vegetable shortening	Soybeans and cottonseed	3 pounds	90.7	---	---	29.7	61.0	33
Corn sirup	1.90 lb. corn	24 ounces	27.1	3.3	.8	2.5	24.6	9
Sugar	37.01 lb. sugar beets	5 pounds	58.2	20.7	1.0	5/19.7	5/38.5	5/34

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Market basket total may differ from sum of product group totals because of rounding of averages.

4/ Farm value of cream and milk only.

5/ Net farm value adjusted for Government payments to producers was 24.1 cents, farm-retail spread adjusted for Government processor tax was 35.8 cents, and farmer's share of retail cost based on adjusted farm value was 41 percent.

Table 17.- Farm food products: Retail cost and farm value, October - December 1961, July - September 1961, October - December 1960, and 1947-49 average 1/

Product 2/	Retail unit	Retail cost: Oct.-Dec. 1961	Retail cost: July-Sept. 1961 4/	Retail cost: Oct.-Dec. 1960	Retail cost: 1947-49 average	Retail cost: Percentage change Oct.-Dec. 1961 from - July-Sept. 1961	Retail cost: Percentage change Oct.-Dec. 1961 from - Oct.-Dec. 1960	Net farm value 3/: Oct.-Dec. 1961	Net farm value 3/: July-Sept. 1961	Net farm value 3/: Oct.-Dec. 1960	Net farm value 3/: 1947-49 average	Net farm value 3/: Percentage change Oct.-Dec. 1961 from - July-Sept. 1961	Net farm value 3/: Percentage change Oct.-Dec. 1961 from - Oct.-Dec. 1960
	Average quantities purchased per urban wage-earner and clerical-worker family in 1952	Dollars	Dollars	Dollars	Dollars	Percent	Percent	Dollars	Dollars	Dollars	Dollars	Percent	Percent
Market basket 5/		1048.89	1061.14	4/1065.18	940.09	-1	-2	398.38	4/399.95	4/417.18	466.02	6/	-5
Meat products		276.73	273.91	278.27	256.08	1	-1	141.25	4/138.87	4/144.99	170.90	2	-3
Dairy products		202.98	201.67	203.07	169.28	1	6/	90.41	89.14	4/92.40	91.66	1	-2
Poultry and eggs		85.47	84.33	99.47	117.01	1	-14	51.51	49.56	4/63.32	80.69	4	-19
Bakery and cereal products													
All ingredients		168.26	167.43	166.88	121.96	6/	1	30.31	4/29.93	4/28.37	34.97	1	7
Grain		---	---	---	—	---	---	22.72	4/22.24	4/21.16	24.96	2	7
All fruits and vegetables		226.86	244.78	231.67	184.68	-7	-2	65.14	4/72.52	4/69.00	60.93	-10	-6
Fresh fruits and vegetables		129.55	147.07	136.99	103.91	-12	-5	42.83	49.86	4/49.44	42.91	-14	-13
Fresh vegetables		63.96	67.69	67.04	53.17	-6	-5	18.41	21.48	4/20.83	22.97	-14	-12
Processed fruits and vegetables		97.32	97.71	94.68	—	6/	3	22.30	4/22.66	4/19.56	—	-2	14
Fats and oils		43.76	44.09	41.32	52.21	-1	6	12.64	4/12.73	11.97	19.84	-1	6
Miscellaneous products		44.83	44.92	44.51	38.87	6/	1	7.13	4/7.20	4/7.13	7.03	-1	0
		Cents	Cents	Cents	Cents	Percent	Percent	Cents	Cents	Cents	Cents	Percent	Percent
Beef (Choice grade)	Pound	78.9	76.9	79.9	68.5	3	-1	45.4	42.2	4/46.8	48.5	8	-3
Lamb (Choice grade)	Pound	66.1	65.2	69.5	63.9	1	-5	30.3	31.8	4/32.1	44.2	-5	-6
Pork (retail cuts)	Pound	58.9	60.1	59.0	59.4	-2	6/	30.7	33.2	31.6	39.7	-8	-3
Butter	Pound	76.3	76.3	76.4	79.4	0	6/	53.8	4/53.7	4/54.6	59.3	6/	-1
Cheese, American process	1/2 pound	36.3	36.2	35.6	29.8	6/	2	15.1	15.0	15.8	16.0	1	-4
Ice cream	1/2 gallon	86.2	86.2	86.4	---	0	6/	7/23.3	4/7/23.3	4/7/23.3	—	0	0
Milk, evaporated	14½ ounce can	15.8	15.9	15.8	13.7	-1	0	6.4	6.4	6.5	7.1	0	-2
Milk, fluid	Quart	25.7	25.4	25.8	20.1	1	6/	11.1	10.9	11.3	10.6	2	-2
Chickens, frying, ready-to-cook	Pound	36.1	36.7	41.1	—	-2	-12	17.9	17.0	4/21.4	—	5	-16
Eggs	Dozen	55.8	54.0	65.7	66.7	3	-15	37.1	35.9	4/46.2	48.0	3	-20
Bread, white													
All ingredients	Pound	21.0	20.9	20.8	13.5	6/	1	3.0	3.0	2.8	3.3	0	7
Wheat	Pound	---	---	---	—	---	---	2.4	2.4	2.3	2.7	0	4
Crackers, soda	Pound	30.2	29.1	29.0	—	4	4	3.8	3.8	3.6	—	0	6
Corn flakes	12 ounces	26.8	26.7	25.9	17.1	6/	3	2.7	2.6	2.2	3.2	4	23
Corn meal	Pound	13.4	13.3	13.1	11.8	1	2	2.8	2.7	2.3	3.6	4	22
Flour, white	5 pounds	55.7	55.9	55.9	48.4	6/	6/	19.1	4/18.8	4/17.9	21.0	2	7
Rolled oats	18 ounces	22.5	22.5	22.2	14.5	0	1	3.9	3.9	3.6	4.9	0	8
Apples	Pound	13.3	20.6	14.2	11.9	-35	-6	5.1	5.7	4/5.8	4.4	-11	-12
Grapefruit	Each	14.0	15.4	15.5	8.5	-9	-10	2.1	3.5	2.7	1.4	-40	-22
Lemons	Pound	19.3	18.8	21.5	17.7	3	-10	4.2	4.7	6.4	5.7	-11	-34
Oranges	Dozen	77.7	81.7	83.0	46.6	-5	-6	23.1	27.6	30.3	12.6	-16	-24
Beans, green	Pound	22.7	20.9	23.5	21.1	9	-3	8.4	9.2	9.6	9.3	-9	-12
Cabbage	Pound	8.0	8.9	8.0	6.9	-10	0	1.9	2.7	1.8	1.9	-30	6
Carrots	Pound	14.8	15.9	14.5	11.1	-7	2	3.5	4.2	3.9	4.0	-17	-10
Celery	Pound	13.8	13.3	13.2	—	4	5	4.0	4.0	3.2	—	0	25
Lettuce	Head	17.4	16.6	16.9	14.5	5	3	5.4	5.6	6.6	6.3	-4	-18
Onions	Pound	10.0	11.6	8.6	8.4	-14	16	3.5	3.9	1.6	3.7	-10	119
Potatoes	10 pounds	56.0	64.0	66.4	51.9	-12	-16	12.8	17.5	4/20.1	25.6	-27	-36
Sweetpotatoes	Pound	14.4	8/18.2	13.2	11.6	-21	9	4.8	4/8/5.0	4.5	4.8	-4	7
Tomatoes	Pound	26.7	25.7	28.4	—	4	-6	9.0	9.6	8.9	—	-6	1
Orange juice, canned	46 ounce can	48.7	48.7	42.9	—	0	14	17.8	19.3	14.1	—	-8	26
Peaches, canned	No. 2-1/2 can	32.5	33.1	33.6	31.5	-2	-3	6.4	4/5.8	5.3	5.3	10	21
Beans with pork, canned	16 ounce can	14.8	14.9	14.8	—	-1	0	2.1	2.1	1.9	—	0	11
Corn, canned	No. 303 can	20.5	21.0	19.7	16.7	-2	4	2.3	4/2.3	2.3	2.7	0	0
Peas, canned	No. 303 can	22.2	22.1	21.5	21.4	6/	3	2.9	3.0	3.0	3.0	-3	-3
Tomatoes, canned	No. 303 can	15.9	15.9	16.0	14.2	0	-1	2.7	4/2.5	2.4	2.6	8	13
Orange juice concentrate, frozen	6 ounce can	24.2	24.3	23.0	—	6/	5	11.8	11.8	8.6	—	0	37
Strawberries, frozen	10 ounces	27.1	27.0	27.0	—	6/	6/	6.0	6.4	4/7.4	—	-6	-19
Beans, green, frozen	9 ounces	22.6	22.9	23.1	—	-1	-2	4.2	4/4.3	4/4.4	—	-2	-5
Peas, frozen	10 ounces	20.5	20.3	20.5	—	1	0	3.1	3.0	2.9	—	3	7
Dried beans (navy)	Pound	17.2	17.0	16.6	19.9	1	4	6.0	6.0	5.3	9.7	0	13
Dried prunes	Pound	41.8	41.8	40.2	23.1	0	4	17.3	18.7	18.0	8.8	-7	-4
Margarine, colored	Pound	28.9	29.2	27.0	39.7	-1	7	8.4	8.5	7.7	12.2	-1	9
Peanut butter	Pound	56.0	55.7	55.5	—	1	1	19.7	18.4	18.3	—	7	8
Salad dressing	Pint	38.3	38.0	36.0	37.8	1	6	7.2	4/7.2	6.6	10.0	0	9
Vegetable shortening	3 pounds	90.7	92.3	83.9	105.6	-2	8	29.7	30.0	27.4	46.2	-1	8
Corn sirup	24 ounces	27.1	27.0	26.7	—	6/	1	2.5	2.8	2.5	—	-11	0
Sugar	5 pounds	58.2	58.6	59.4	48.4	-1	-2	19.7	4/19.8	4/20.2	19.4	-1	-2

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

4/ Most retail cost figures for July-September 1961 have been revised; figures in other columns revised as indicated.

5/ Sum of product groups may differ slightly from market-basket total because of rounding of averages.

6/ Less than 0.5 percent.

7/ Farm value of cream and milk only.

8/ 2-month average.

Table 18.- Farm food products: Farm-retail spread and farmer's share of the retail cost, October-December 1961, July-September 1961, October-December 1960, and 1947-49 average 1/

Product 2/	Retail unit	Farm-retail spread 3/						Farmer's share			
		Oct.-Dec. 1961	July-Sept. 1961	Oct.-Dec. 1960	1947-49 average	Percentage change Oct.-Dec. 1961 from - July-Sept. 1961	Percentage change Oct.-Dec. 1961 from - Oct.-Dec. 1960	Oct.-Dec. 1961	July-Sept. 1961	Oct.-Dec. 1960	1947-49 average
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Percent	Percent	Percent	Percent
Market basket 5/	Average quantities purchased per urban wage-earner and clerical-worker family in 1952	650.51	661.19	4/648.00	474.07	-2	6/	38	38	39	50
Meat products		135.48	135.04	4/133.28	85.18	6/	2	51	51	4/52	67
Dairy products		112.57	112.53	4/110.67	77.62	6/	2	45	44	4/46	54
Poultry and eggs		33.96	34.77	4/ 36.15	36.32	-2	-6	60	59	4/64	69
Bakery and cereal products											
All ingredients		137.95	137.50	4/138.51	86.99	6/	6/	18	18	17	29
Grain		---	---	---	---	6/	6/	14	13	13	20
All fruits and vegetables		161.72	172.26	4/162.67	123.75	-6	-1	29	30	30	33
Fresh fruits and vegetables		86.72	97.21	4/ 87.55	61.00	-11	-1	33	34	36	41
Fresh vegetables		45.55	46.21	4/ 46.21	30.20	-1	-1	29	32	31	43
Processed fruits and vegetables		75.02	75.05	4/ 75.12	---	6/	6/	23	23	21	---
Fats and oils		31.12	31.36	29.35	32.37	-1	6	29	29	29	38
Miscellaneous products		37.70	37.72	4/ 37.38	31.84	6/	1	16	16	16	18
		Cents	Cents	Cents	Cents	Percent	Percent	Percent	Percent	Percent	Percent
Beef (Choice grade)	Pound	33.5	34.7	4/33.1	20.0	-3	1	58	55	4/59	71
Lamb (Choice grade)	Pound	35.8	33.4	4/37.4	19.7	7	-4	46	49	46	69
Pork (retail cuts)	Pound	28.2	26.9	27.4	19.7	5	3	52	55	54	67
Butter	Pound	22.5	22.6	4/21.8	20.1	6/	3	71	70	71	75
Cheese, American process	½ Pound	21.2	21.2	19.8	13.8	0	7	42	41	44	54
Ice cream	½ gallon	62.9	62.9	4/63.1	---	0	6/	27	27	27	---
Milk, evaporated	14½ ounce can	9.4	9.5	9.3	6.6	-1	1	41	40	41	52
Milk, fluid	Quart	14.6	14.5	14.5	9.5	1	1	43	43	44	53
Chickens, frying, ready-to-cook	Pound	18.2	19.7	4/19.7	---	-8	-8	50	46	4/52	---
Eggs	Dozen	18.7	18.1	4/19.5	18.7	3	-4	66	66	70	72
Bread, white											
All ingredients	Pound	18.0	17.9	18.0	10.2	1	0	14	14	13	24
Wheat	Pound	---	---	---	---	---	---	11	11	11	20
Crackers, soda	Pound	26.4	25.3	25.4	---	4	4	13	13	12	---
Corn flakes	12 ounces	24.1	24.1	23.7	13.9	0	2	10	10	8	19
Corn meal	Pound	10.6	10.6	10.8	8.2	0	-2	21	20	18	31
Flour, white	5 pounds	36.6	37.1	4/38.0	27.4	-1	-4	34	34	32	43
Rolled oats	18 ounces	18.6	18.6	18.6	9.6	0	0	17	17	16	34
Apples	Pound	8.2	14.9	4/ 8.4	7.5	-45	-2	38	28	4/41	37
Grapefruit	Each	11.9	11.9	12.8	7.1	0	-7	15	23	17	16
Lemons	Pound	15.1	14.1	15.1	12.0	7	0	22	25	30	32
Oranges	Dozen	54.6	54.1	52.7	34.0	1	4	30	34	37	27
Beans, green	Pound	14.3	11.7	13.9	11.8	22	3	37	44	41	44
Cabbage	Pound	6.1	6.2	6.2	5.0	-2	-2	24	30	23	28
Carrots	Pound	11.3	11.7	10.6	7.1	-3	7	24	26	27	36
Celery	Pound	9.8	9.3	10.0	---	5	-2	29	30	24	---
Lettuce	Head	12.0	11.0	10.3	8.2	9	17	31	34	39	43
Onions	Pound	6.5	7.7	7.0	4.7	-16	-7	35	34	19	44
Potatoes	10 pounds	43.2	46.5	4/46.3	26.3	-7	-7	23	27	30	49
Sweetpotatoes	Pound	9.6	7/13.2	8.7	6.8	-24	10	33	4/7/27	34	41
Tomatoes	Pound	17.7	16.1	19.5	---	10	-9	34	37	31	---
Orange juice, canned	46 ounce can	30.9	29.4	28.8	---	5	7	37	40	33	---
Peaches, canned	No. 2-1/2 can	26.1	27.3	28.3	26.2	-4	-8	20	18	16	17
Beans with pork, canned	16 ounce can	12.7	12.8	12.9	---	-1	-2	14	14	13	---
Corn, canned	No. 303 can	18.2	18.7	17.4	14.0	-3	5	11	11	12	16
Peas, canned	No. 303 can	19.3	19.1	18.5	18.4	1	4	13	14	14	14
Tomatoes, canned	No. 303 can	13.2	13.4	13.6	11.6	-1	-3	17	4/16	15	18
Orange juice concentrate, frozen	6 ounce can	12.4	12.5	14.4	---	-1	-14	49	49	37	---
Strawberries, frozen	10 ounces	21.1	20.6	4/19.6	---	2	8	22	24	27	---
Beans, green, frozen	9 ounces	18.4	18.6	4/18.7	---	-1	-2	19	4/19	19	---
Peas, frozen	10 ounces	17.4	17.3	17.6	---	1	-1	15	15	14	---
Dried beans (navy)	Pound	11.2	11.0	11.3	10.2	2	-1	35	35	32	49
Dried prunes	Pound	24.5	23.1	22.2	14.3	6	10	41	45	45	38
Margarine, colored	Pound	20.5	20.7	19.3	27.5	-1	6	29	29	29	31
Peanut butter	Pound	36.3	37.3	37.2	---	-3	-2	35	33	33	---
Salad dressing	Pint	31.1	30.8	29.4	27.8	1	6	19	19	18	26
Vegetable shortening	3 pounds	61.0	62.3	56.5	59.4	-2	8	33	33	33	44
Corn sirup	24 ounces	24.6	24.2	24.2	---	2	2	9	10	9	---
Sugar	5 pounds	38.5	38.8	4/39.2	29.0	-1	-2	34	4/34	4/34	40

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ The farm-retail spread is the difference between the retail cost and the net farm value, table on opposite page.

4/ Most farm-retail spread figures for July-Sept. 1961 have been revised; figures in other columns revised as indicated.

5/ Sum of product groups may differ slightly from market-basket total because of rounding of averages.

6/ Less than 0.5 percent.

7/ 2-month average.

Table 19.- Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1960 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket 3/			1052.57	---	---	406.59	645.98	39
Meat products			276.22	---	---	143.33	132.89	52
Dairy products			199.59	---	---	88.93	110.66	45
Poultry and eggs		Average quantities	90.42	---	---	56.19	34.23	62
Bakery and cereal products	Farm produce equivalent	purchased per urban						
All ingredients	to products bought	wage-earner	164.54	---	---	28.31	136.23	17
Grain	by urban families	and	---	24.13	2.87	21.26	---	13
All fruits and vegetables		clerical-	237.07	---	---	71.44	165.63	30
Fresh fruits and vegetables		worker family	143.30	---	---	52.14	91.16	36
Fresh vegetables		in 1952	71.72	---	---	23.92	47.80	33
Processed fruits and vegetables			93.77	---	---	19.30	74.47	21
Fats and oils			40.75	---	---	11.13	29.62	27
Miscellaneous products			43.98	---	---	7.27	36.71	17
			Cents	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.16 lb. Choice grade cattle	Pound	81.0	51.9	4.2	47.7	33.3	59
Lamb (Choice grade)	2.37 lb. lamb	Pound	69.7	43.0	7.0	36.0	33.7	52
Pork (retail cuts)	2.13 lb. hogs	Pound	56.7	33.9	4.5	29.4	27.3	52
Butter	Cream and whole milk	Pound	74.9	---	---	53.2	21.7	71
Cheese, American process	Milk for American cheese	½ Pound	34.3	---	---	14.9	19.4	43
Ice cream	Cream and milk	½ Gallon	86.8	---	---	4/22.6	64.2	26
Milk, evaporated	Milk for evaporating	14-1/2 ounce can	15.7	---	---	6.4	9.3	41
Milk, fluid	Wholesale fluid milk	Quart	25.3	---	---	10.9	14.4	43
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	42.7	---	---	23.1	19.6	54
Eggs	1.03 doz.	Dozen	54.9	---	---	37.3	17.6	68
Bread, white								
All ingredients	Wheat and other ingredients	Pound	20.3	---	---	2.8	17.5	14
Wheat	.882 lb. wheat	Pound	---	2.6	.3	2.3	---	11
Crackers, soda	1.38 lb. wheat	Pound	29.0	4.1	.5	3.6	25.4	12
Corn flakes	1.57 lb. white corn	12 ounces	25.8	3.0	.7	2.3	23.5	9
Corn meal	1.34 lb. white corn	Pound	13.3	2.6	.3	2.3	10.8	18
Flour, white	6.9 lb. wheat	5 pounds	55.4	20.3	2.3	18.0	37.4	32
Rolled oats	2.31 lb. oats	18 ounces	22.0	4.6	.8	3.8	18.2	17
Apples 5/	1.08 lb. apples	Pound	16.2	---	---	5.7	10.5	35
Grapefruit	1.04 grapefruit	Each	14.4	---	---	2.7	11.7	19
Lemons	1.04 lb. lemons	Pound	19.5	---	---	5.2	14.3	27
Oranges	1.04 doz. oranges	Dozen	74.8	---	---	27.3	47.5	36
Beans, green	1.09 lb. snap beans	Pound	25.3	---	---	10.8	14.5	43
Cabbage	1.10 lb. cabbage	Pound	9.5	---	---	2.4	7.1	25
Carrots	1.06 lb. carrots	Pound	14.1	---	---	3.6	10.5	26
Celery	1.11 lb. celery	Pound	13.9	---	---	3.9	10.0	28
Lettuce	1.41 lb. lettuce	Head	17.3	---	---	6.2	11.1	36
Onions	1.06 lb. onions	Pound	9.2	---	---	2.2	7.0	24
Potatoes	10.42 lb. potatoes	10 pounds	71.8	---	---	24.3	47.5	34
Sweetpotatoes 5/	1.12 lb. sweetpotatoes	Pound	13.7	---	---	4.7	9.0	34
Tomatoes	1.18 lb. tomatoes	Pound	31.6	---	---	11.5	20.1	36
Orange juice, canned	5.88 lb. Fla. oranges for canning	46 ounce can	43.0	---	---	13.4	29.6	31
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	33.6	---	---	5.4	28.2	16
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	14.9	---	---	1.9	13.0	13
Corn, canned	2.49 lb. sweet corn	No. 303 can	19.2	---	---	2.3	16.9	12
Peas, canned	.69 lb. peas for canning	No. 303 can	20.7	---	---	3.0	17.7	14
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	15.9	---	---	2.3	13.6	14
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	22.5	---	---	8.9	13.6	40
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	26.7	---	---	7.1	19.6	27
Beans, green, frozen	.71 lb. beans for processing	9 ounces	22.9	---	---	4.3	18.6	19
Peas, frozen	.70 lb. peas for freezing	10 ounces	20.0	---	---	3.1	16.9	16
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	16.7	---	---	5.5	11.2	33
Dried prunes	.97 lb. dried prunes	Pound	39.7	---	---	17.6	22.1	44
Margarine, colored	Soybeans, cottonseed, and milk	Pound	26.9	---	---	6.9	20.0	26
Peanut butter	1.77 lb. peanuts	Pound	55.5	---	---	18.4	37.1	33
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	36.0	---	---	6.2	29.8	17
Vegetable shortening	Soybeans and cottonseed	3 pounds	81.9	---	---	24.7	57.2	30
Corn sirup	1.90 lb. corn	24 ounces	26.7	3.5	.7	2.8	23.9	10
Sugar	38.51 lb. sugar beets	5 pounds	58.2	21.7	1.1	6/20.6	6/37.6	6/35

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Market basket total may differ from sum of product group totals because of rounding of averages.

4/ Farm value of cream and milk only.

5/ 11-month average.

6/ Net farm value adjusted for Government payments to producer was 25.0 cents, farm-retail spread adjusted for Government processor tax was 34.9 cents, farmer's share of retail cost based on adjusted farm value was 43 percent.

Table 20.- Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1961 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket 3/			1,060.22	---	---	403.94	656.28	38
Meat products			277.60	---	---	140.67	136.93	51
Dairy products			201.97	---	---	89.46	112.51	44
Poultry and eggs		Average quantities purchased	86.76	---	---	52.07	34.69	60
Bakery and cereal products	Farm produce equivalent	per urban						
All ingredients	to products bought	wage-earner	167.69	---	---	29.85	137.84	18
Grain	by urban families	and	---	24.78	2.78	22.00	---	13
All fruits and vegetables		clerical- worker	237.91	---	---	71.12	166.79	30
Fresh fruits and vegetables		family	140.29	---	---	48.91	91.38	35
Fresh vegetables		in 1952	68.13	---	---	20.65	47.48	30
Processed fruits and vegetables			97.62	---	---	22.21	75.41	23
Fats and oils			43.41	---	---	13.63	29.78	31
Miscellaneous products			44.88	---	---	7.14	37.74	16
			Cents	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.16 lb. Choice grade cattle	Pound	79.2	48.9	4.4	44.5	34.7	56
Lamb (Choice grade)	2.37 lb. lamb	Pound	65.9	37.7	6.3	31.4	34.5	48
Pork (retail cuts)	2.13 lb. hogs	Pound	59.2	36.4	5.0	31.4	27.8	53
Butter	Cream and whole milk	Pound	76.3	---	---	53.8	22.5	71
Cheese, American process	Milk for American cheese	1/2 pound	36.4	---	---	15.1	21.3	41
Ice cream	Cream and milk	1/2 gallon	86.4	---	---	4/23.2	63.2	27
Milk, evaporated	Milk for evaporating	14-1/2 ounce can	15.9	---	---	6.5	9.4	41
Milk, fluid	Wholesale fluid milk	Quart	25.4	---	---	10.9	14.5	43
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	38.5	---	---	19.4	19.1	50
Eggs	1.03 doz.	Dozen	54.9	---	---	36.4	18.5	66
Bread, white								
All ingredients	Wheat and other ingredients	Pound	20.9	---	---	2.9	18.0	14
Wheat	.882 lb. wheat	Pound	---	2.6	.2	2.4	---	11
Crackers, soda	1.38 lb. wheat	Pound	29.4	4.2	.5	3.7	25.7	13
Corn flakes	1.57 lb. white corn	12 ounces	26.4	3.5	.9	2.6	23.8	10
Corn meal	1.34 lb. white corn	Pound	13.3	2.9	.2	2.7	10.6	20
Flour, white	6.9 lb. wheat	5 pounds	56.0	20.8	2.3	18.5	37.5	33
Rolled oats	2.31 lb. oats	18 ounces	22.4	4.4	.6	3.8	18.6	17
Apples	1.08 lb. apples	Pound	17.3	---	---	6.2	11.1	36
Grapefruit	1.04 grapefruit	Each	13.5	---	---	2.3	11.2	17
Lemons	1.04 lb. lemons	Pound	19.8	---	---	4.8	15.0	24
Oranges	1.04 doz. oranges	Dozen	77.7	---	---	27.1	50.6	35
Beans, green	1.09 lb. snap beans	Pound	24.3	---	---	10.0	14.3	41
Cabbage	1.10 lb. cabbage	Pound	8.9	---	---	2.1	6.8	24
Carrots	1.06 lb. carrots	Pound	15.8	---	---	4.1	11.7	26
Celery	1.11 lb. celery	Pound	13.4	---	---	3.8	9.6	28
Lettuce	1.41 lb. lettuce	Head	16.6	---	---	5.0	11.6	30
Onions	1.06 lb. onions	Pound	10.3	---	---	3.4	6.9	33
Potatoes	10.42 lb. potatoes	10 pounds	62.9	---	---	16.8	46.1	27
Sweetpotatoes 5/	1.12 lb. sweetpotatoes	Pound	16.1	---	---	5.8	10.3	36
Tomatoes	1.18 lb. tomatoes	Pound	28.7	---	---	9.6	19.1	33
Orange juice, canned	5.88 lb. Fla. oranges for canning	46 ounce can	48.3	---	---	18.8	29.5	39
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	33.2	---	---	5.7	27.5	17
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	14.9	---	---	2.1	12.8	14
Corn, canned	2.49 lb. sweet corn	No. 303 can	20.6	---	---	2.3	18.3	11
Peas, canned	.69 lb. peas for canning	No. 303 can	22.0	---	---	3.0	19.0	14
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	16.0	---	---	2.5	13.5	16
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	24.6	---	---	11.2	13.4	46
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	27.0	---	---	6.8	20.2	25
Beans, green, frozen	.71 lb. beans for processing	9 ounces	22.9	---	---	4.3	18.6	19
Peas, frozen	.70 lb. peas for freezing	10 ounces	20.7	---	---	3.0	17.7	14
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	17.0	---	---	5.9	11.1	35
Dried prunes	.97 lb. dried prunes	Pound	41.6	---	---	18.4	23.2	44
Margarine, colored	Soybeans, cottonseed, and milk	Pound	28.6	---	---	9.1	19.5	32
Peanut butter	1.77 lb. peanuts	Pound	55.8	---	---	19.1	36.7	34
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	37.4	---	---	7.5	29.9	20
Vegetable shortening	Soybeans and cottonseed	3 pounds	90.0	---	---	32.2	57.8	36
Corn sirup	1.90 lb. corn	24 ounces	27.0	3.4	.7	2.7	24.3	10
Sugar	36.13 lb. sugar beets	5 pounds	58.9	20.8	1.0	6/19.8	6/39.1	6/34

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Market basket total may differ from sum of product group totals because of rounding of averages.

4/ Farm value of cream and milk only.

5/ 11-month average.

6/ Net farm value adjusted for Government payments to producer was 24.0 cents, farm-retail spread adjusted for Government processor tax was 36.4 cents, and farmer's share of retail cost based on adjusted farm value was 41 percent.

Preliminary estimates.

Table 21.--The farm food market basket: Revised quarterly data for 1960

Item and period	Retail cost	Gross farm value	Net farm value	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Dollars	Percent
Market basket					
Jan.-Mar.	1,029.82	---	396.45	633.37	38
Apr.-June	1,056.79	---	409.85	646.94	---
July-Sept.	---	---	402.78	655.69	---
Oct.-Dec.	1,065.18	---	417.11	648.07	---
Meat products					
Jan.-Mar.	268.50	---	139.62	128.88	52
Oct.-Dec.	---	---	144.99	133.28	52
Dairy products					
Jan.-Mar.	---	---	89.17	109.94	---
Oct.-Dec.	---	---	92.40	110.67	46
Poultry and eggs					
Jan.-Mar.	---	---	51.93	32.81	---
Oct.-Dec.	---	---	63.32	36.15	64
Bakery and cereal products (all ingredients)					
Jan.-Mar.	162.49	---	28.11	134.38	---
Apr.-June	163.31	---	28.67	134.64	---
July-Sept.	---	---	28.06	137.42	---
Bakery and cereal products (grain)					
Jan.-Mar.	---	24.58	21.41	---	---
Apr.-June	---	24.56	21.64	---	---
July-Sept.	---	23.32	20.83	---	---
Oct.-Dec.	---	24.06	21.16	---	---
All fruits and vegetables					
Jan.-Mar.	---	---	70.29	160.60	30
Apr.-June	---	---	75.17	171.98	---
Oct.-Dec.	---	---	69.00	162.67	---
Fresh fruits and vegetables					
Jan.-Mar.	---	---	50.77	86.81	---
Apr.-June	---	---	56.13	97.72	---
Oct.-Dec.	---	---	49.44	87.55	---
Fresh vegetables					
Oct.-Dec.	---	---	20.83	46.21	---
Processed fruits and vegetables					
July-Sept.	---	---	19.07	74.73	---
Oct.-Dec.	---	---	19.56	75.12	---
Fats and Oils					
Oct.-Dec.	---	---	11.91	29.41	---
Miscellaneous products					
Jan.-Mar.	---	---	7.25	36.21	17
Oct.-Dec.	---	---	7.13	37.38	---
	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)					
Jan.-Mar.	---	53.4	49.3	31.9	61
Apr.-June	---	53.6	---	---	---
July-Sept.	---	49.7	---	---	---
Oct.-Dec.	---	50.9	46.8	33.1	59
Lamb (Choice grade)					
Jan.-Mar.	---	45.9	36.8	32.0	---
Apr.-June	---	47.1	---	---	---
Oct.-Dec.	---	38.4	32.1	37.4	---

Continued -

Table 21.--The farm food market basket: Revised quarterly data for 1960 - Con.

Item and period	Retail cost	Gross farm value	Net farm value	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Dollars	Percent
Pork (retail cuts)					
Jan.-Mar.	---	29.0	---	---	---
Butter					
Jan.-Mar.	---	---	52.7	22.0	---
Oct.-Dec.	---	---	54.6	21.8	---
Ice cream					
Jan.-Mar.	---	---	22.4	65.2	---
Oct.-Dec.	---	---	23.3	63.1	---
Chickens, frying, ready-to-cook					
Oct.-Dec.	---	---	21.4	19.7	52
Eggs					
Jan.-Mar.	---	---	31.9	16.5	66
Oct.-Dec.	---	---	46.2	19.5	---
Bread (all ingredients)					
Apr.-June	---	---	2.8	17.3	---
Bread (wheat only)					
Jan.-Mar.	---	2.6	---	---	---
Apr.-June	---	2.6	2.3	17.8	11
Crackers, soda					
Jan.-Mar.	---	4.1	---	---	---
July-Sept.	---	3.9	3.5	25.5	---
Oct.-Dec.	---	4.0	---	---	---
Flour					
Jan.-Mar.	---	20.7	18.3	36.4	33
Apr.-June	---	20.5	18.3	37.2	---
July-Sept.	---	19.6	17.6	38.0	---
Oct.-Dec.	---	20.2	17.9	38.0	---
Apples					
Jan.-Mar.	---	---	5.1	9.0	36
Apr.-June	---	---	6.0	12.4	33
Oct.-Dec.	---	---	5.8	8.4	41
Potatoes					
Oct.-Dec.	---	---	20.1	46.3	---
Strawberries, frozen					
July-Sept.	---	---	7.3	19.4	---
Oct.-Dec.	---	---	7.4	19.6	---
Beans, green, frozen					
Oct.-Dec.	---	---	4.4	18.7	---
Peas, frozen					
July-Sept.	---	---	3.0	17.0	15
Salad dressing					
Oct.-Dec.	---	---	6.5	29.5	---
Vegetable shortening					
Oct.-Dec.	---	---	27.1	56.8	32
Sugar 1/					
Jan.-Mar.	---	21.8	---	---	---
Apr.-June	---	21.8	---	---	---
July-Sept.	---	21.8	---	---	---
Oct.-Dec.	---	21.3	20.2	39.2	34

1/ Revised net farm value adjusted for Government payments to producers: Jan.-Mar. 25.2; Apr.-June 25.2; July-Sept. 25.2; Oct.-Dec. 24.6; farm-retail spread adjusted for Government processor tax: Jan.-Mar. 34.1; Apr.-June 33.9; July-Sept. 35.0; Oct.-Dec. 36.5; farmer's share of retail cost based on adjusted farm value: Jan.-Mar. 44 percent, Oct.-Dec. 41 percent.

Table 22.--The market basket of farm food products: Indexes of retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1913 - 1961 1/

Year	Retail cost 1957-59=100	Farm value 1957-59=100	Farm-retail spread 1957-59=100 2/	Farmer's share	Year	Retail cost 1957-59=100	Farm value 1957-59=100	Farm-retail spread 1957-59=100 2/	Farmer's share
				Percent					Percent
1913:	36	42	32	46	1938:	45	43	46	39
1914:	37	42	34	45	1939:	43	42	45	38
1915:	36	40	34	44					
1916:	44	49	40	45	1940:	44	43	44	40
1917:	60	70	53	47	1941:	48	52	44	44
1918:	62	79	51	51	1942:	56	66	49	48
1919:	70	84	60	48	1943:	63	80	52	51
					1944:	62	79	53	52
1920:	77	83	74	43	1945:	63	84	53	53
1921:	58	58	59	40	1946:	72	95	59	52
1922:	56	55	56	40	1947:	88	114	71	51
1923:	56	56	57	40	1948:	95	121	77	51
1924:	55	55	55	40	1949:	89	106	79	47
1925:	60	63	58	42					
1926:	61	63	60	42	1950:	89	105	78	47
1927:	59	60	59	41	1951:	99	121	84	49
1928:	59	63	57	42	1952:	100	118	88	47
1929:	59	62	58	42	1953:	97	109	89	44
					1954:	95	103	90	43
1930:	58	55	59	39	1955:	93	96	92	41
1931:	46	41	50	35	1956:	94	95	93	40
1932:	39	31	44	32	1957:	97	98	97	40
1933:	38	31	42	32	1958:	103	105	101	40
1934:	43	36	45	34	1959:	100	97	102	38
1935:	47	46	46	39					
1936:	48	48	48	40	1960:	101	99	103	39
1937:	50	51	48	42	1961:	3/102	3/ 99	3/105	3/38

1/ The dollar figures for the market basket can be converted to index numbers on a 1957-59 base by dividing by the following 1957-59 average: Retail cost, $1,037.3; farm value, $409.8; and farm-retail spread, $627.5. Indexes on a 1947-49 base were published in Supplement for 1956-60 to Farm-Retail Spreads for Food Products, Supp. for 1956-60 to Misc. Pub. 741, U.S. Dept. Agr., Jan. 1961. The market basket statistics in dollars may be converted to index numbers, 1947-49=100, by dividing by the following: Retail cost, $940.1; farm value, $466.0; farm-retail spread, $474.1. Indexes, 1947-49=100, for the last 3 years are:

	Retail cost 1947-49=100	Farm value 1947-49=100	Farm-retail spread 1947-49=100
1959	111	85	135
1960	112	88	136
1961 3/.....	113	87	138

2/ The farm-retail spread was adjusted to exclude processing taxes in 1933-35 and to include Government payments to processors in 1943-46.

3/ Preliminary.

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